

**Ice Cream Mfrs.
Pledge To Fight
Lagging Sales****New Equipment at Dairy
Exhibit Seen Means of
Boosting Packaged Volume**

By Phil B. Redeker

ATLANTIC CITY, N. J.—An all-out effort to recapture the 160,000,000 gallons of ice cream per year which the American public hasn't been consuming since 1946 was pledged by the ice cream producing industry convening here, and at the Dairy Industries Exposition were exhibited a multiplicity of new products that will assist the industry in its campaign.

That 160,000,000 gallons represents the decline in annual ice cream consumption since 1946 (per capita consumption has dropped from 3.6 gal. then to 3 gal. currently).

Many suggestions for boosting consumption were offered both at the formal sessions and during informal conferences. Some thought prices were too high, others felt that the industry should drive cooperatively for a bigger share of the consumer's dollar instead of directing competitive efforts at one another.

One school of thought suggests that one possible way of expanding sales would be to push "soft ice cream" in the winter months. Soft ice cream, it is claimed, doesn't impart such a feeling of "coldness" to the human

ATLANTIC CITY, N. J.—The 1950 Dairy Industries Exposition (held every two years) will probably return to Atlantic City.

Pointing out that only two U. S. cities have both sufficient roofed-in display area and a large enough concentration of hotel space to accommodate the show, Roberts Everett, show manager, said that Chicago has not yet been able to clear hotel facilities for a suitable week in 1950, thus indicating Atlantic City for the 1950 affair. Everett said that the Dairy Show sponsors are interested in staging it in the midwest just as soon as the necessary facilities can be guaranteed.

system, it is not so filling, and yet the essential food value so highly prized in ice cream is there. It can also be used as a covering for other food products, such as pancakes or waffles.

There seemed to be a general agreement, however, that an increase in volume would have to come in packaged ice cream sales, and that to get such an increase the product must be (1) low in cost; (2) attractively packaged; (3) easily purchased.

"Packaged ice cream must be available where the housewife buys the family staples," declared one veteran ice cream manufacturer. "Surveys are showing an overwhelming tendency on the part of the housewife to make all of her purchases in one place."

Refrigeration equipment manufacturers, exhibiting at the Dairy Show, were doing their part to provide the aids necessary to "make it easy for the housewife to purchase ice cream." Many types of ice cream merchandising cabinets were shown, some portable, some with no tops, others with glass or plastic lids, many with superstructure displays that in some cases had three dimensional pictures.

Ice cream vending machines that provide packaged ice cream at the drop of a coin, new type storage cabinets for retail stores that cut distribution costs and assure an adequate supply to the retailer, new high-capacity "soft" ice cream makers, and advancements in refrigerated truck design that will permit

(Concluded on Page 6, Column 1)

INSIDE DOPE

by GEORGE F. TAUBENECK

Gag of the Week
Stories of the Week
More Arguments, Yet
Wind-up of the Garvey Incident
Tax Report Plan Proposed
By Gesick
Regrettable Oversight

Gag of the Week

Definition of Money: A commodity that can't buy happiness, but helps you look for it in a lot of interesting places.

Stories of the Week

Now and then subscribers to the NEWS contribute "stories of the week" which are truly funny. More often than not, however, these yarns are quite unfunny—or else we've told them before in this front-page column. So these contributed stories are merely acknowledged with thanks. But please keep on sending them!

The following letter to "Inside Dope," for example, contains some really original humor. We quote, verbatim:

Arcticaire Refrigeration Co.
Kansas City 2, Missouri
Editor:

We are enclosing our check in the amount of \$5.00 for a copy of your new book "The Marshal's Baton." We are looking forward to reading it with a great deal of pleasure.

Also, since answering the telephones, and occasionally pinch hitting as a floor salesman are part of my daily routine here at the office, once in awhile I receive an inquiry or a request that is a little out of the ordinary, and thought perhaps you might enjoy a few of these. Such as:

The lady who called and asked if we had any domestic refrigerators, back in the days when they were really scarce. I replied, "Yes, we have a 9 ft. box," and the lady answered, regretfully, "Oh, but I can't use that. My kitchen only has an 8 ft. ceiling."

On another day I was showing a lady a Harderfreezer and had just told her that it had a $\frac{1}{4}$ hp. air cooled compressor. "That's exactly what I need," she replied, "an air cooled one, as we live on a farm, and our electricity isn't in yet."

Also, there was the thrifty lady who called one busy day and asked, hopefully, if we bought used, copper tubing. I asked how much she had for sale, and she replied: "About an eight inch piece: left over from connecting our refrigerator, you know."

One hot day several months ago we received an emergency call from a local tavern.

"A bad sulphur gas leak. Must have a refrigeration man, immediately. The fumes are so strong the customers have all left, and the waitresses are all sick, etc., etc."

What the serviceman (who dropped everything and rushed over) found on his arrival was not a gas leak, but a large, and very, very dead rat caught between the belt and the flywheel.

And so it goes in the refrigeration business.

Mr. Rostock and I enjoyed meeting you at the Cleveland show last January, and hope to have the pleasure of seeing you again. Also, we both still enjoy the NEWS each week.

Cordia Rostock (Mrs. Ted)

More Arguments, Yet

Not too long ago, "Inside Dope" published a letter from a Frigidaire dealer—and answered it, heartily.

This dealer said, in essence, that he was going to vote for Truman because—during his experience as an

**Interest High as Dates Near for
NARC, REMA-RSES Conferences****Contractors Debate
Licensing at Forum**

CLEVELAND—The hotly-debated subjects of guarantees and licensing are two of the five forum-discussion topics to be threshed out by 18 speakers during the third annual convention of the National Association of Refrigeration Contractors.

Labeled the "know how-show how" convention, the meeting will be held Nov. 18 and 19 in the Hotel Sherman, Chicago.

Other subjects to be treated in the forum style are equipment sales and merchandising methods, service and management methods, and service sales merchandising methods. Each panel session will be presided over by a moderator and each will include short talks by the speakers, a general discussion, and questions from the floor.

Regarding guarantees, NARC commented that "this is a subject on which all parties feel strongly." It said the convention provides an opportunity "to get all sides of the question out on the table 'with no holds barred.'

In addition to the forum discussions, there will be three addresses. They will be given by Mark Mooney, Carrier Corp.; Joseph T. Meek, Illinois Federation of Retail Associations; and (Concluded on Back Page, Column 1)

**7-Cu.Ft. Shelvador
Price Increased \$10**

CINCINNATI—Crosley Corp. has announced a \$10 price increase on its model S-79 7-cu. ft. Shelvador refrigerator, bringing the list price of this model to \$229.95.

Increased cost of production, which prompted a \$10 increase in two other Crosley models, D-88 and M-88, several weeks ago, is the reason for the increase, according to Inwood Smith, manager of the refrigeration section.

**5 Los Angeles Groups
Combine In Meeting**

LOS ANGELES—One of the largest refrigeration industry gatherings in local history is expected Tuesday night, Nov. 9, at the Rodger Young Auditorium here, when George F. Taubeneck, editor and publisher of AIR CONDITIONING & REFRIGERATION NEWS, will address a meeting—open to anyone who has an interest in the industry—sponsored by five associations active in this area.

The five sponsoring groups are: the American Society of Refrigerating Engineers, American Society of Heating & Ventilating Engineers, Refrigeration Service Engineers Society, Refrigeration Contractors Association, Inc., and National Association of Practical Refrigerating Engineers.

Program plans call for a social gathering at 6 p.m., dinner at 7 p.m., and the meeting proper at 8 p.m. Neal S. Templin of the Refrigeration Contractors Association, 1206 Maple Ave., Los Angeles, is handling the requests for reservations.

**FRB Clarifies Reg. W
Conditioner Listing**

WASHINGTON, D. C.—Portable room air conditioners in excess of 1 hp. (one ton of refrigeration) rated capacity and evaporative air coolers which do not incorporate a refrigerating unit are exempt from provisions of Regulation W, the board of governors of the Federal Reserve System has announced.

**REMA-RSES Educational Exhibit
May Draw Huge Crowd**

PITTSBURGH—Hotel reservations to date indicate "a very large attendance" for the First Mid-Western Refrigeration and Air Conditioning Educational Exhibit and Conference in Chicago Nov. 19-22, according to the Refrigeration Equipment Manufacturers Association.

The conference, sponsored jointly by Rema and the Refrigeration Service Engineers Society, will be held in Hotel Sherman in conjunction with the 11th annual RSES convention.

The educational conference program includes talks on servicing water coolers and milk coolers, selecting and installing finned evaporators, safe handling of compressed gases, built-in motor protection, and the design of motor-speed compressors.

These subjects will be discussed by Earl Jennings, service manager, Temprite Products Corp.; William Ural, Victor Products Corp.; C. L. Benson, manager of McQuay's Refrigeration Div.; Robert Moore, Superior Valve & Fittings Co.; B. O. Haun, engineer, Spencer Thermostat Co.; and C. E. Ploger, chief engineer, Electric Refrigeration Div., Servel, Inc.

Questions and answer forums have been scheduled to open the sessions on Nov. 20 and 22.

Exhibits of more than 75 refrigeration equipment manufacturers will be a big feature of the educational conference. The exhibits will be similar in scope to those recently shown in San Francisco and Boston.

"Unlike the ordinary trade show type of display, these exhibits are (Concluded on Page 25, Column 1)

**Supermarket Men
Convene Nov. 15-19**

BOSTON—Self-service meats and rising store costs will share the spotlight at the mid-year meeting of the Super Market Institute, Sidney R. Rabb, president of the institute and chairman of the board of Stop & Shop, Inc., here announced recently. The meetings will be held Nov. 15-19 at the Del Coronado hotel, Coronado Beach, Calif.

The convention, featuring informal "shirt-sleeve" discussions, is expected to attract leaders of the supermarket industry from all parts of the country, according to Rabb, as well as a large delegation of operators from the western part of the United States.

The first day of the meetings will be devoted to a business session of the Super Market Institute. The program for the remaining days follows: (Concluded on Page 4, Column 3)

**Fedders-Quigan Unveils New Models, Huge Ad
Plans In Push To Triple Room Cooler Volume**

BUFFALO—An advertising and promotion program eight times as great as that used in 1948, new products including new console models, and a drive to sign up new dealers will mark the Fedders-Quigan push to triple room air conditioner sales in 1949.

These plans were announced at sales clinics held here last month for distributors and the field organization under the direction of E. A. Bonneville, sales manager of the Fedders-Quigan unit air conditioner division.

On display at the clinics were demonstration samples of the $\frac{1}{4}$ -hp. and $\frac{1}{2}$ -hp. Fedders-Quigan console room air conditioners which are now available in limited supply. Also on display was a window model finished in ivory which is now available in the $\frac{1}{2}$ -hp. and $\frac{1}{4}$ -hp. window models.

All 1949 units will be designed to cover a greatly expanded range of electrical characteristics, it was stated.

Keynote of the expanded sales plan is a vigorous drive to sign distributors and dealers in newly opened sales territories from coast-to-coast, Bonneville declared.

The 1949 advertising and sales promotion campaign, as outlined by W. H. J. Rowland, advertising manager,

will call for the use of practically all types of media with particular emphasis on large space insertions in newspapers in 72 key cities.

An intensive educational program covering sales and service, under the (Concluded on Page 4, Column 5)

Is the System Wet?
Don't guess—KNOW!

DFN MOISTURE INDICATOR
tells instantly

For Freon and Methyl Chloride.
Accurate . . . fast . . . inexpensive

See your jobber or write
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BESSEMER BLDG.
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Cortellesse Appointed to New England Sales Post

SPRINGFIELD, Mass.—Graham Refrigeration Products Co., Inc., distributor here, has announced the recent appointment of H. S. "Burt" Cortellesse as sales manager in the New England territory.

He has been in commercial and industrial refrigeration sales work for 17 years, starting with McCray Refrigerator Co. For several years Cortellesse served as Boston branch manager for Puro Filter Corp., and more recently he was manager of the commercial refrigeration department of Willmann Corp., Boston distributor.



H. S. Cortellesse

Record Number of Sessions Set for NRDGA Meeting

NEW YORK CITY—The National Retail Dry Goods Association plans to hold its 38th annual convention in the Pennsylvania hotel here from Jan. 10-14, NRDGA officials declared.

The largest number of sessions in the association's history—33—are scheduled to fill the five-day program.

According to present plans, separate sessions will be devoted to the interests of top management, controllers, personnel executives, store managers, sales promotion and advertising directors, credit men, and representatives of smaller stores.

Deepfreeze Meeting Maps Refrigerator Sales Campaign



The first "refrigerator sales conference" of the Deepfreeze Div. of Motor Products Corp. was held recently in Highland Park, Ill. Attending the meeting were Deepfreeze home office officials, regional and district sales managers, product service engineers, and three former executives of the Frostair Div. of General Tire & Rubber Co. which Deepfreeze recently purchased. On hand to discuss sales and distribution of Deepfreeze home freezers as well as the Frostair Duplex refrigerator were: (Seated) S. J. Seibert, product service manager; R. V. Newbell, advertising and sales promotion manager; F. F. Duggan, general sales manager; Rhea V. Shields, home economics director; Peter Lowcher, refrigerator sales specialist; and F. A. Mitchell, refrigerator sales manager. Standing are: J. G. Fath, R. F. Harnish, B. G. Sanderson, T. F. Elrod, J. G. Watts, R. H. Schau, R. R. Hand, J. T. Hagan, G. L. Drake, J. P. Strange, E. W. Buller, J. R. Carey, John Fellmann, C. T. Redding, W. S. Hall, J. C. Brigance, W. B. Rives, A. W. Marsh, L. M. Nelsen, and J. E. Guertin, all of the sales and advertising departments.

Use of Systematic Freight Absorption May Prove To Be Illegal, FTC Official Warns

ATLANTIC CITY, N. J.—Court decisions upholding orders of the

Federal Trade Commission against various forms of delivered-price and quantity-discount systems mean that basing point systems, zone pricing, and any other systematic freight absorption are "out," according to Lowell B. Mason, an FTC member.

Addressing a joint meeting here of the American Hardware Manufacturers Association, the National Wholesale Hardware Association, and the

National Association of Sheet Metal Distributors, Mason declared:

"By that I mean that it will be a violation of the law for anyone to use a systematic pricing system which allows him to pay the freight out of his own pocket in order to sell in a competitor's territory."

Mason expressed the same opinion some time ago.

"It may be urged that my statement of the law is too broad, that freight absorption and zone prices and even an individual universal delivered prices system are not banned unless there is a probability of a tendency to restrain prices," he said.

"These words are too tenuous for anyone to grasp. In my opinion, anyone who uses freight absorption, zone prices, or an individual universal delivered price system, or relies on a quantity discount rate established by merely trade custom, operates under the shadow of illegality and certainly is taking a calculated risk."

Mason, who is often at odds with his fellow FTC commissioners, suggested that clarification of Federal policy is urgently needed. He said the terms "businessman" and "law violator" are practically synonymous "considering the number of Federal rulings affecting business which are not understood and which are therefore constantly being violated."

He described the FTC as "the most powerful concentration of bureaucratic power over business in the world."

"If we are to continue our present hit and miss system of prosecutions, we should put every businessman's name in a glass bowl on the roof of the FTC and draw lots to see who should be sued," he commented.

Conferees were urged by Mason to send their views on the court decisions to the Senate Trade Practice Committee now investigating the basing point situation. The committee opens public hearings in Washington early next month.

Mfr. To Sell Lockers Through Contractors

SEATTLE, Wash.—A sales policy of distributing its line of "warm room" frozen food lockers through qualified refrigeration contractors has been announced by George Overton, head of the George-Ann Co. here.

"We feel the refrigeration contractor is the logical one to sell and install our units," he explained.

'Cold Rubber' Plant To Operate In New England

NAUGATUCK, Conn.—A cold rubber plant, said to be the first in New England, will be set up at the local synthetic rubber plant operated by the U. S. Rubber Co. for the Reconstruction Finance Corp., it was announced here.

Output of this plant, it was said, will go to manufacturers of mechanical goods and producers of insulated wire and other products in this area.

J&H Arranges \$5 Million Purchase of WAA Goods

CLEVELAND—Jack & Heintz Precision Industries, Inc., announced it has completed arrangements with War Assets Administration for the purchase of machinery and equipment, having an original cost in excess of \$5,000,000.

This equipment, formerly under lease, is required for the manufacturing plans and programs now underway, the company said.

The company also announced that it has started negotiations with WAA to purchase buildings 3 and 4, part of its Bedford plants, which are now held under lease.

Accelerated activity in aviation products related to the company, together with other commercial product lines now being manufactured, plus those under development, have made necessary certain rearrangements in the plant and manufacturing structure of the company," it was explained.

As part of its over-all program, Jack & Heintz also announced it has decided to sell the Berea Rd. plant. This move is for the purpose of consolidating its manufacturing facilities into a more concentrated structure.

Canadian School Plans Refrigeration Course

HAMILTON, Ont., Can.—An evening school course in refrigeration engineering is planned by M. V. McQueen, principal of Westdale Composite School here.

The first class of its kind to be conducted in Hamilton, the refrigeration engineering course will be taught by J. S. Stoliker, refrigeration contractor, McQueen said.

"The course will cover the theory and practice of cooling engines and will be open to any adult student interested in the subject," he said.

COLD WATER FOR USERS Cold Cash for Dealers

Drinking Water Specialists for Over 50 Years!



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COOLERS

Puro Filter Corporation of America

436-440 Lafayette Street, New York 3, N. Y.

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BTC Evaporator Plates are Basic for Good Refrigeration

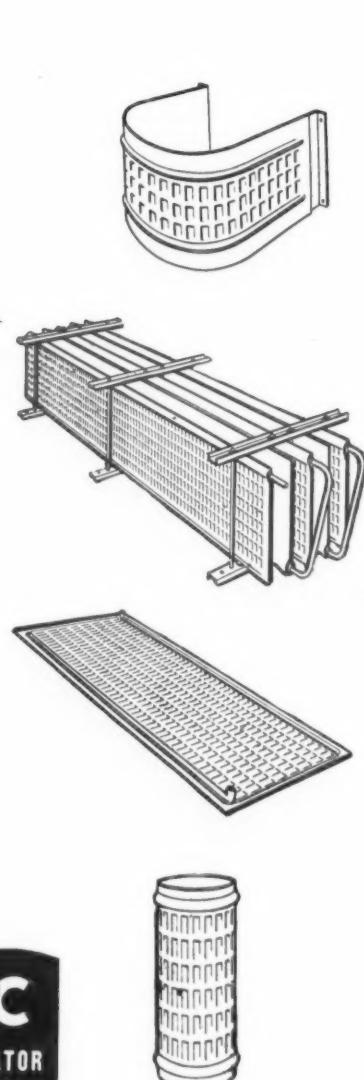
From the original Plate-Freezer to the new Continuous Method Freezer, evaporator plates have been basic for good refrigeration. High heat transfer is most practical with food packages in contact with refrigerated surfaces.

BTC Evaporator Plates furnish maximum refrigerated surfaces because they are full-flooded. Special "Cross-Flow" construction gives greater turbulence to the refrigerant for increased heat transfer . . . and permits refrigeration over every square inch of plate surface. Ordinary coils or tube plates allow the refrigerant to flow in only one direction; BTC Evaporator Plates have multiple paths for refrigerant flow — this means low pressure drop for uniform refrigeration and lowest operating cost.

The basic BTC Evaporator Plate design can be easily fabricated into "L", Step, "U", Cylindrical, and other shapes to meet all types of commercial and domestic refrigeration applications. Write Brewer-Titchener for helpful, illustrated bulletins.

THE BREWER-TITCHENER CORPORATION
BINGHAMTON, N. Y.

BTC
EVAPORATOR
PLATES





WHAT FRIGIDAIRE ADVERTISING LEADERSHIP MEANS TO FRIGIDAIRE COMMERCIAL DEALERS

Frigidaire advertising has just one purpose—to help every Frigidaire Commercial Dealer win sales leadership in his market. In line with that policy, Frigidaire has developed one of the most complete advertising programs in the commercial refrigeration and air conditioning industry.

In 1948, for example, Frigidaire commercial and air conditioning magazine advertising will total over 185,000,000 messages, an all-time Frigidaire record.

In addition, Frigidaire has spent hundreds of thousands of dollars on advertising materials for the use of Frigidaire Commercial Dealers—everything from direct mail to attention-compelling display and neon store signs.

This advertising leadership is profit insurance of a mighty practical kind. Yet it's only one of the many ways in which Frigidaire leadership is helping build better business for Frigidaire Commercial Dealers.



THE NEW LUM AND ABNER SHOW reaches additional millions of people every Sunday night on CBS. No other line of commercial refrigeration and air conditioning equipment enjoys such powerful radio advertising support.

BETTER ADVERTISING MEANS BETTER SALES FOR FRIGIDAIRE COMMERCIAL DEALERS



You're twice as sure
with two great names

FRIGIDAIRE made only by **GENERAL MOTORS**



see your "DETROIT"
WHOLESALE
for
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"DETROIT"
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"Detroit" Heating and Refrigeration Controls • Engine Safety Controls • Float Valves and Oil Burner Accessories
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**Give Your Refrigeration Equipment
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**SPECIFY HERMETIC UNITS
WITH BUILT-IN
KLIXON
Dome Mounted
PROTECTORS**



Regardless of what you manufacture . . . refrigerators, beverage coolers, frozen food cabinets, showcases . . . you can build a reputation for quality and dependability by using hermetic units with built-in Klixon dome-mounted Protectors.

Installed by the manufacturer of the hermetic compressor, these foolproof protectors keep motors from burning out. They take into account such factors as clogging of condensers, fan failure, low voltages, hot locations, poor ventilation—and prevent the motor from burning out by shutting off the power should the motor become dangerously overheated. When the motor cools, the protector automatically turns on the power permitting the unit to maintain refrigeration. Specify and insist on hermetic units with Klixon dome-mounted Protectors. They will reduce service calls, cut replacements and repairs, build customer goodwill.

Klixon Motor Starting Relay completes the combination required to start and protect the hermetic motor. Its positive action and long life eliminate starting troubles and make it a fitting companion for the Klixon Protector. Used and recommended by leading refrigeration manufacturers.

KLIXON TRADE MARK REG. U. S. PAT. OFF.

KLIXON
U. S. PAT. OFF.
SPENCER THERMOSTAT COMPANY
2311 Forest St., Attleboro, Mass.

Supermarket Parley--

(Concluded from Page 1, Column 3)

Tuesday, Nov. 16, 9:15 a.m. to 12:55 p.m. "Merchandising for Profit and Controlling Store Expenses." Chairman, Claude W. Edwards, vice president and general manager, Alpha Beta Food Markets, Inc., Los Angeles.

Wednesday, Nov. 17, 9:15 a.m. to 12:55 p.m. "Current Thinking in Store Expansion and Construction." Chairman, George Friedland, president, Food Fair Stores, Inc., Philadelphia.

Thursday, Nov. 18, 9:15 a.m. to 12:55 p.m. "Present Status of Self-Service Meats and Produce." Chairman, Earle A. Chiles, vice president and merchandise manager, Fred Meyer, Inc., Portland, Ore.

Friday, Nov. 19, 9:15 a.m. to 12:55 p.m. "Personnel, Supervision and Employee Relations." Chairman, Lester Milgram, personnel and public relations director, Milgram Super Markets, Kansas City, Mo.

Chicago Group Hears Phillips

CHICAGO—H. A. Phillips, president of H. A. Phillips Co., will discuss "Ammonia Liquid Return System Without Pumps" at a meeting of the Chicago ASRE Nov. 11.

Radiant Heating Talk Set

DETROIT—"Radiant Baseboard Panel Heating" will be discussed before the Michigan ASHVE, Nov. 15, at the Rackham building by Prof. Warren S. Harris, special research associate professor at the University of Illinois.

Getting Facts on Fedders' 1949 Conditioner



E. A. Bonneville (extreme right) explains 32 feature improvements incorporated in 1949 model Fedders room air conditioner to these regional sales managers (left to right): Sherman Bishop, west coast; Joel Wier, south eastern; John Hayes, Great Lakes; Edward Becker, New York, New England; John H. Seippel, north central; Ted Nemes, middle Atlantic; W. L. Ledbetter, south central.

Washer Jobbers--

(Concluded from Page 1, Column 4)

with the advantages of dealing through parts wholesalers.

David H. Goldfarb of Washer Sales & Service Co., Pittsburgh, told the group that any jobber who wanted to handle the servicing of automatic washers could get the parts business—and the manufacturers would welcome them with open arms. But, he noted, they had to take the whole package—both service and parts—and therein lay the rub.

The association, during its four-day meeting, also discussed the problem of handling in-warranty parts. The assembly reached the conclusion that whether or not the jobber handled these parts and on what basis was strictly his own business and not of the association.

PARTS PACKAGING HIT

Bill Schwefel of R. & S. Parts Co., Milwaukee, complained of the poor packaging of parts by manufacturers before shipment. Some packages, he asserted, looked as though they had been loaded with a shovel.

This caused many parts to arrive in damaged condition, he declared, and his luck is getting credit for them at the factory or with the carrier has been bad.

Other members advised him that liability for such damage rightfully belonged to the carrier under interstate commerce rules and that he could collect from the carrier.

Schwefel, speaking from recent experience, informed the gathering that they had better make sure that every one of their employees knows exactly how much he is making per hour. If he does not, the employer may run into trouble with the Wage & Hour division of the Labor department when inspectors come around, he said.

He added that the employer must also keep a record showing the number of regular hours the employee worked with the rate of pay for that time, plus the overtime hours and the rate for that period.

During a general discussion of difficulties experienced with the wage and hour inspectors, one jobber commented that the best way to meet inspections is to get your attorney on the spot immediately and have him go over your accounts with the inspector.

Fedders-Quigan Plans--

(Concluded from Page 1, Column 4)

supervision of Frank R. DeRoberts, educational manager, will insure maximum assistance to all new and present distributors in conducting sales and service meetings and in handling problems in the field.

Gordon DeJarlais, service department manager, described plans for expanding service facilities. Three new regional service managers will be appointed to work with distributors and dealers to handle field service and application problems.

Something NEW!

CHARGING BOMB

- Speed up assembly line operation.
- Small capacity refrigerant cylinder facilitates more accurate and quicker charging of units carrying small or critical charges.
- Made to your requirements. (size shown 1 1/8" O.D. x 11 1/8" —14 oz. Freon). Attached to unit on assembly line, transferred as unit moves, eliminating stoppage.
- Construction seamless. Complete with forged brass valve.
- Ideal for field servicing. Bear ICC stamping to permit shipping.

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AMERICAN the "ARISTOCRAT" OF THE FREEZER FIELD

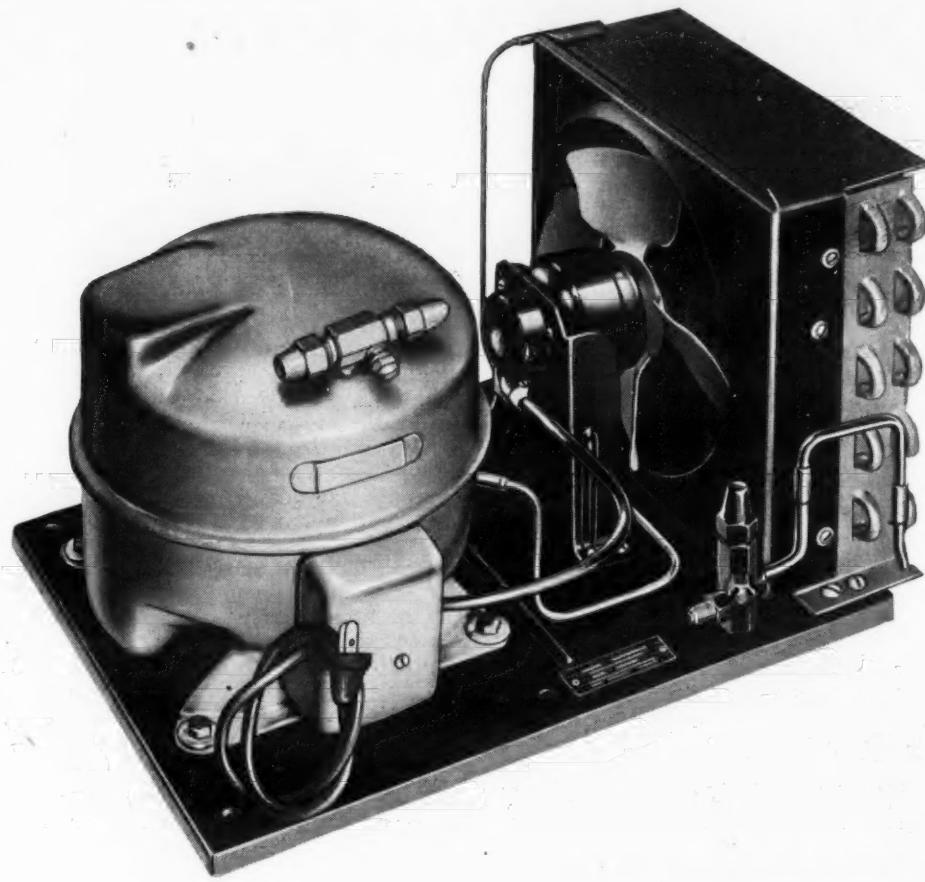
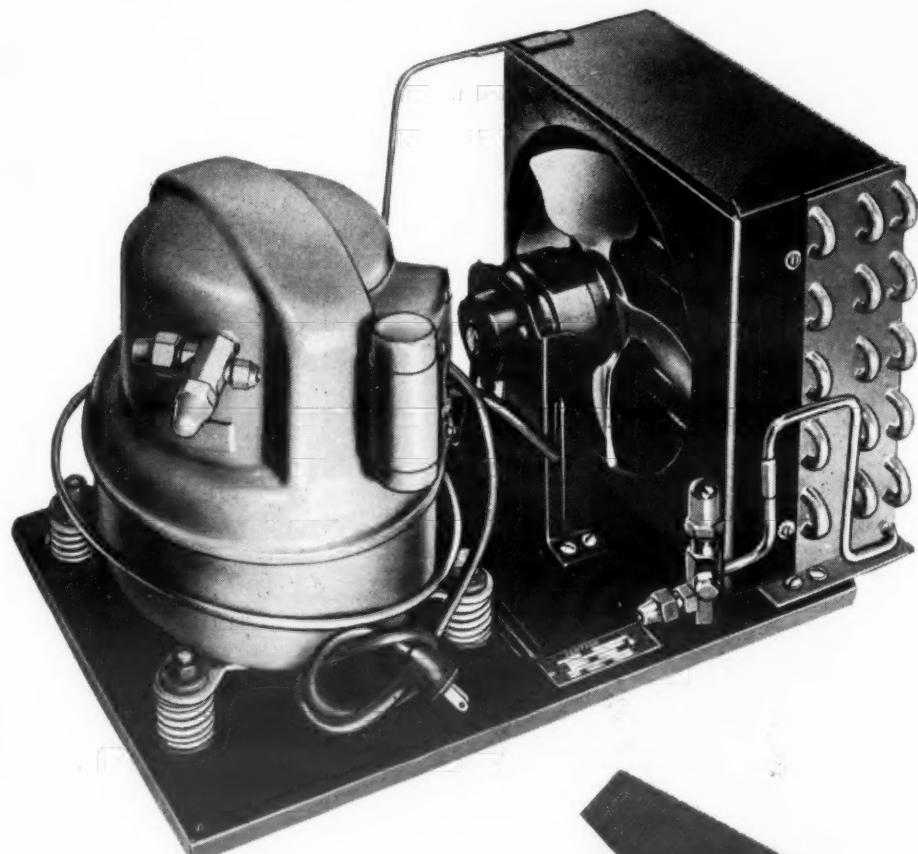
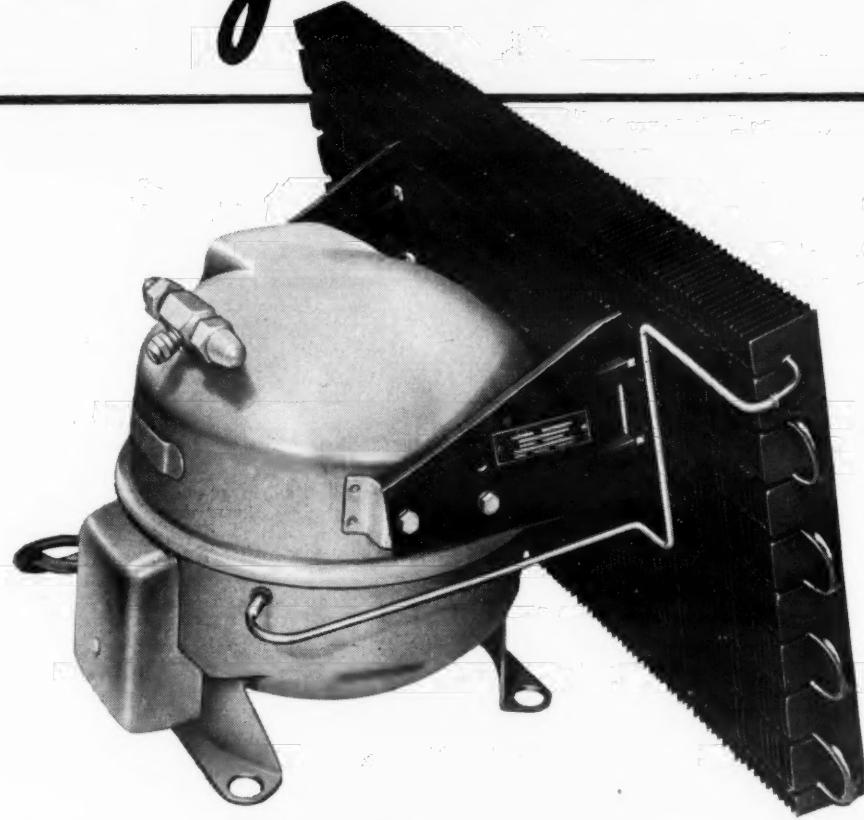
DELUXE FOOD FREEZERS ★ VISUAL DISPLAY FROZEN FOOD and ICE CREAM MERCHANTISING CABINETS ★ ARID-AIR DRY BEVERAGE COOLERS ★ ICE CUBE MAKERS ★ WALK-INS.

MAKE MONEY with AMERICAN Products
Write for Complete Information about

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P.O. BOX 3, LAKE ST. STATION—MINNEAPOLIS, MINNESOTA

Over a Million
a Year!



**TECUMSEH HERMETIC UNITS
LEAD THE INDUSTRY IN
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condensing units for the
refrigeration industry . . .*

Many New Merchandising Aids for Dairy Industry Unveiled at Show

Self-Serve Cabinets, Vending Equipment In the Spotlight

(Continued from Page 1)

larger and longer hauls were some of the other contributions offered by the refrigeration equipment at the show.

Some of the highlights of the refrigerated equipment exhibited included the following:

New self-contained bobtail soda fountains exhibited by the Stanley Knight Corp. have a slide out arrangement for the condensing unit to permit easy servicing.

Creamer units in the Stanley Knight line now have a special control section in a front panel. This control section holds the expansion valve and pressure and temperature controls, which are thus easily accessible when the cover is removed.

'Malted' Dispensing Station

A "malted milk dispensing station" to either fit in with a regular soda fountain or which could be set up and used by itself was introduced by Grand Rapids Cabinet Co. The assembly was complete with dispensing cabinet, mixers, and other auxiliary equipment. Grand Rapids Cabinet also showed its ice cream and dairy products refrigerated display cases, available in a variety of finishes, and other fountain and ice cream store equipment.

Center of much attention from representatives of ice cream companies was a low-temperature storage cabinet in the Kold-Hold Mfg. Co. booth. This storage cabinet, using Kold-Hold plates as shelving, had a storage capacity of 56 2 1/2-gal. and 14 5-gal. cans of ice cream.

Storage Units Are 'Hot'

Big interest of the ice cream manufacturers in this type of storage cabi-

net is that it can be used in distant or not-too-active "stops" (retail establishments dispensing the producer's ice cream), and thus affords the advantages of reducing the number of deliveries, eliminating overtime deliveries, and assuring that reserve stocks will always be available.

The sliding of the cans across the shelves helps to keep the cold plates defrosted, although a number of such installations have been fitted with automatic defrost systems.

Also exhibited by Kold-Hold was its "Pakage" refrigeration assembly for milk and dairy product trucks operating in the 34-36° F. temperature range. This assembly consists of two Kold-Hold plates, a condensing unit, and a baffle as a "package" that can be fitted into refrigerated truck bodies.

Frick Co.'s "Eclipse" line of V-type "Freon" refrigeration compressors in sizes from 10 to 60 hp. incorporate a number of design refinements according to the Frick representatives in attendance at the exhibit. Among the design refinements are a suction valve unloader, dynamically balanced crankshaft, strainer located inside the compressor body, and water jacket cooling for the compressor head.

Improved 'Vita-Vision'

Refrigeration Corp. of America exhibited a wide range of equipment to be used in the merchandising of packaged ice cream and ice cream confections. Spottedlighted, of course, was the Frigid-Freeze "spot special" portable, open ice cream merchandising cabinet, available in a range of sizes, and equipped with the "Vita-Vision" three dimensional lighted, colored displays on the superstructure above the cabinet.

Improvements have been made in the "Vita-Vision" displays, use of a new type screen eliminating the "flip" or blurring that was once characteristic of this type of lighted display. Also shown were merchandising cabinets with sliding tops, these being designed for retail establishments or products that were likely to be

"slower movers."

An operating model of the "ice cream bar," a self-contained serving center for dispensing both dish and packaged ice cream, was another highlight in the Refrigeration Corp. exhibit.

A two-stage refrigeration system capable of producing temperatures as low as -60° F. was introduced at the Creamery Package Mfg. Co. booth. Main components of this system are a 6-cylinder, 6% bore by 5-in. stroke ammonia booster compressor; a 6-cylinder 3 1/2 by 3 1/2 ammonia compressor for the second stage, and an intercooler.

New Frigidaire Line

Frigidaire's exhibit, one of the most elaborate at the show, spotlighted the new ice cream cabinet line which incorporates many new design and operating principles (the line was described in detail in the Oct. 25 issue of the NEWS).

Show visitors got the first public look at the new cabinet design marked by stainless steel top and white Polystyrene lids. They also were checked in on such new operating features as the underneath-the-cabinet condenser, removable compressor, and refrigerated sub-mullions between each lid opening.

Fourteen ice cream cabinet models and a feature freezer complete with merchandising top and illuminated canopy were the products shown.

An old-fashioned ice cream parlor motif comprised the general theme of the Frigidaire exhibit, and oldtime ice cream parlor tables and chairs were interspersed to carry out the exhibit theme.

York Corp.'s operating models of its flake-ice machine and its automatic ice cube makers were getting a big play from show visitors, as both pieces of equipment have many applications in the dairy industries field.

Other equipment shown by York included an evaporative condenser and a 5 1/4 by 4 1/4 ammonia compressor.

Kelvinator Storage Cabinet

Kelvinator's new 20-cu. ft. ice cream storage cabinet, now in production, went on display for the first time at the Dairy Show. Don H. Carter, Kelvinator ice cream cabinet sales manager, said the 20-cu. ft. storage cabinet was designed to permit retail outlets to buy ice cream in larger quantities, thus saving on big-lot purchases, and to cut handling and transportation costs. It has a capacity of 150 gallons of package ice cream, or 70 gallons bulk.

The 20-cu. ft. cabinet is 88 in. long, 35 in. high, and slightly less than 30 in. wide, to permit easy passage through any door-opening of average width. It is powered by Kelvinator's "Polarisphere" sealed condensing unit.

Kelvinator also exhibited its 1949 line of ice cream cabinets introduced earlier this fall (see story in Sept. 9 issue of the NEWS), and a special ice cream merchandising cabinet with a superstructure display.

Worthington Pump & Machinery Corp. had a variety of items of equipment of interest to the dairy industry, of which its refrigeration equipment formed a part. Refrigeration items shown included a 6 x 6 vertical ammonia compressor, and a 3 by 3 self-contained ammonia compressor.

A refrigerating machine for refrigerated trucks that operates at practically constant speed and which is so designed that it can be fitted into the body design without resulting in any unsightly or hazardous bulges, was introduced by the Batavia Body Co.

Constant-Speed Truck Unit

Using a standard transmission power take-off, the constant speed effect is attained through the use of double Vickers pumps operating a small fluid pump which furnishes the drive for the compressor. Compressor speed variation is thus held within a maximum of 75 r.p.m., officials of the Batavia Body Co. declare. The system involves no change in the generator or in the characteristics of the truck's electrical system.

Use of this type of a system in a truck can save 1,000 lbs. in payload weight through the substitution of direct-acting cold plates for holdover plates, Batavia officials stated.

To make the condensing unit assembly fit in better with the truck

(Continued on next page)



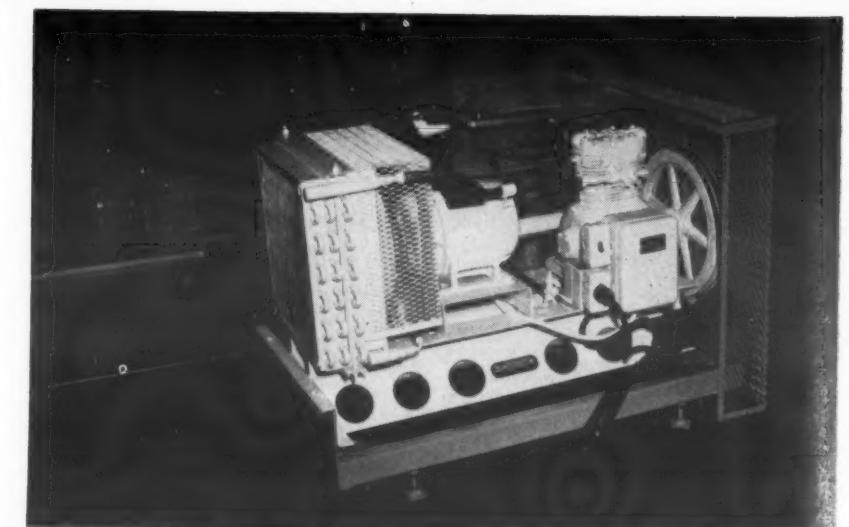
E. G. Sears of Ace Cabinet Corp. (right) shows Olive Charles the "easy-out" condensing unit feature on the cutaway of Ace's home and farm freezer.



A cutaway of the new Liquid Carbonic "Conventaire" stack-action condenser gets the studious attention of a group of Dairy Show visitors.



Frederic Kubli of Buenos Aires, Argentina, South American representative for Mojonier Bros. Co. (left), samples a cool drink at the "ice cream bar" in the Refrigeration Corp. of America booth.



Above is shown the special condensing unit assembly for refrigerated trucks which the Batavia Body Co. is assembling in its own plant. It is part of a complete truck refrigerating unit which operates from a conventional power take-off, but utilizing double Vickers pumps which provide a constant speed drive. Note the location of the condenser at the end of the condensing unit assembly, rather than behind the compressor. Reason for this is to cut down the width, and to put the condenser in line with the directional air flow along the movement of the truck.

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Fleetwood All-Porcelain, All-Purpose Self Service Display Case

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Some choice territories still open on the entire line of cases, open cases and coolers. Phone - wire - write.

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HARRY ALTER'S REFRIGERATION PARTS CATALOG

A catalog issued to and for the trade only... Write NOW—on your letterhead, for your copy of the most nearly complete refrigeration-parts-and-supplies catalog in the business—the new DEPENDABOOK!

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WHOLESALE ONLY

The 'Old' Provides Setting For the 'New'

(Above) P. W. Budworth, Frigidaire ice cream cabinet sales manager, demonstrates the plastic lids on the newly designed Frigidaire ice cream cabinets, introduced at the Show, to Geraldine Arnold and Iva Phelps of Conneaut Creamery Co., Conneaut, Ohio, as F. A. Binns of Frigidaire's Cleveland office looks on.

(Below) Frigidaire displayed its setting in the motif of an old-time ice cream parlor, and got some authentic furnishings to carry out the scheme.

**New Models Shown To Dairy Industry**

(Continued from preceding page)

body contours and to make vital parts more accessible for servicing, Batavia Body Co. is now assembling its own condensing unit (purchasing components) and has realigned the various elements so that their arrangement is somewhat different from that on the conventional compressor base.

The condenser is placed at one end of the base, instead of alongside the compressor, this serving to cut down the over-all width of the assembly and to remove the objection that the other arrangement serves—especially in truck installations—to block off the effective condenser area. In the Batavia arrangement the condenser air movement is in line with the truck movement and hence gets the maximum flow of air.

All controls and serviceable connections are mounted on the outside of the assembly, so as to be easily accessible for servicing. A device to permit the adjustment of the shaft to tighten or loosen the belt drive for the compressor is also readily accessible.

There is no solid floor or deck to the condensing unit compartment, so that it may be readily flushed down and cleaned with a hose.

Two new units were introduced at the Dairy Show by Fogel Refrigerator Co. An open, self-service display case, Model FCO-8, was especially designed, it is said, for the display and merchandising of ice

cream, frozen foods, and like products. Model DEO-8 is a triple-deck, open, self-service model, with all three decks of the case refrigerated for the display and merchandising of packaged meat, vegetables, and dairy products.

Also shown at the Fogel booth were a wall-type, self-service case with full-vision arrangement from top to bottom and equipped with sliding doors, plus their Model 72F, a 6-ft. ice cream and frozen food display case equipped with interior lighting and slanted front.

New Fountain Freezers

Said to be especially designed for "freezer fresh" service, Sweden Freezer Co. had a double-feed fountain freezer with a 20-gal.-an-hour capacity and a 30-gal.-an-hour model. New features of the line included plastic tops on the mix spouts and a new dasher for more rapid ejection of ice cream and easier cleaning.

Selb Mfg. Co. displayed their S-4 remote-type dairy case and the XS-4 self-contained model. Capacity of the cases is said to be 266 paper quarts, 192 square glass quarts, and 143 round glass quarts.

In the first exhibit of its complete line of soda fountains and back-bar equipment, The Fischman Co. featured a new 3-ft., self-contained "junior bobtail" with four syrup pumps, one soda, and one water draft arm. Also shown was the 5½-ft. bobtail and 6-ft. bobtail. The company's "all-in-one" line of "Soda Pak" fountain units, featuring new all-Formica counter designs were shown, together with auxiliary fountain units including down-draft grills, and sandwich units.



Ralph S. Towne, Craig Vending Machine Co., takes a "sample" from the new ice cream vending machine displayed in the Ace Cabinet Corp. booth. Ace is exclusive sales agent east of the Mississippi to ice cream manufacturers for the unit.

Vends Ice Cream Bars

Displayed in the Ace Cabinet Corp. booth was the Craig automatic ice cream vending machine which is being manufactured by Craig Vending Machine Co. in cooperation with Ace Cabinet in the New Bedford plant of Ace Cabinet Corp.

The new vending machine is said to hold six columns of 42 ice cream bars each, with a total capacity of 252 bars. Designed to vend standard size chocolate covered bars, the unit is equipped with a coin receiver which accepts two nickels, one dime, or a quarter and delivers change with ice cream. It has full-flooded evaporator plates and has a hermetic unit.

It was announced that Ace Cabinet Corp. will be exclusive distributor of the vending unit east of the Mississippi to ice cream manufacturers.

In the Ace Cabinet display, headed by a cutaway model of its model A-10 farm and home freezer, were ice cream dispensing cabinets, display cabinets with 3-dimensional superstructure, creamer soda fountain, bobtail, fountainette, and sandwich units.

Bishop Offers Sales Cabinets

In the R. H. Bishop Co. display was an 18-cu. ft. low-temperature, open display cabinet, a 22-cu. ft. storage case or farm freezer, a 24-cu. ft. high-temperature, open display case for vegetables and dairy products, an 18-cu. ft. low-temperature wall cabinet featuring superstructure with 3-dimensional pictures, an 18-cu. ft. open "aisle-type" display case, and a 24-cu. ft. high-temperature wall case with 3-dimensional pictures. Also shown was their new plastic shipping container, designed for shipment of

To Merchandise Packaged Ice Cream

Elton Hess of Schaefer, Inc. (right), gives a demonstration of a self-service ice cream cabinet to Mr. and Mrs. E. Hansberry of Atlantic City. Note unusual display sign suspended over the cabinet, which has glass-covered sliding doors.

frozen and fresh foods. The container is designed to be used as a returnable unit.

At the Phenix Soda Fountain Co. booth were displayed a 40-gal. creamer soda fountain unit, a 6-ft. bobtail unit, and a 33-in. "bantam" soda fountain unit.

A full line of ice cream hardening and ice cream dispensing cabinets from 2 to 12-hole capacity were

shown at the Anheuser-Busch booth. Plastic lids in white or black were available with the ice cream dispensing cabinets.

De Laval Separator Co. displayed a 16½-cu. ft. chest-type farm freezer and had information on a new model F-200 25-cu. ft. food freezer which is an upright type with double doors and equipped with freezing compartments.

(Concluded on next page)

KOLD-HOLD
builds better plates
for every application

There are two big reasons why you can count on the performance of Kold-Hold Hold-Over and evaporator plates to every refrigerating installation.

FIRST: They are designed and engineered primarily to refrigerate efficiently and economically.

SECOND: They are built with care and to quality standards which assures that each and every Kold-Hold plate does its designed job to the fullest degree of satisfaction. Before any plate leaves the factory it is pressure tested under water and completely dehydrated.

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Would you like to know more about how Kold-Hold plates can be used for quick freezing, chilling and holding, short period cooling, or for "Hold-Over" truck refrigeration? Complete descriptive literature is yours free — write today!

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KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL ST., LANSING 4, MICHIGAN

New Equipment for Dairy Products Field--

(Concluded from preceding page) ment and locker-type drawers for food storage.

First showing of their new "Con-vecaire," stack-action condenser on ice cream cabinet models was the high point of the Liquid Carbonic Corp. booth.

This design, according to company claims, eliminates fan on high side, the stack action drawing the air current through the condenser. This construction eliminates both noise and dust collection, it is said.

Another "first showing" here was the "Vizo-Magic" merchandiser unit which can be installed on the company's ice cream cabinet and incorporates a superstructure with Vita-Vision illustrations. An exclusive feature claimed in this merchandiser is the new "magic lift" unit, said to keep packages at top of sleeve no matter how many packages are removed. The lift is a spring actuated elevator which descends as the sleeve is loaded and ascends as packages are removed. The company's full line of ice cream cabinets, soda fountain, and luncheonette units were shown.

A working model of its cold water ice making machine was on display at the booth of Henry Vogt Machine Co. Simple adjustment changes the size of ice delivery, according to company claims.

Continuous Custard Freezer

Carvel Corp. had the first showing of a continuous frozen custard machine, now available in remote or self-contained models. Feature claimed for the machine was the automatic

temperature control on continuous freezer which can deliver from 5 gals. to full capacity. The units have built-in double dispensing units with 50-gal. refrigerated mix storage compartment.

Shown at the H. A. Phillips & Co. booth was a new "dump trap" liquid refrigerant return system designed for compressor protection. The system is an arrangement of a liquid trap with automatic controls and connecting piping for protecting the compressors from slugs of liquid refrigerant. The liquid refrigerant is trapped in a suction line accumulator from where it drains into the high side liquid receiver. Also shown was the company's regular line of ammonia float valves.

Coca-Cola Fountain Cooler

A new Coca-Cola dispenser produced by Bastian-Blessing Co. in cooperation with Dole Valve Co. of Chicago incorporating a principle eliminating use of ice and cooled by refrigerating system of the soda fountain was shown at the Bastian-Blessing booth. In the unit a glycol solution is circulated through tubing located in direct contact with tubing of fountain system supplying a secondary circuit. The bath in the unit is maintained at 36° F., it is said, with drinks dispensed at less than 40° F. Also shown was a new 8-ft. twin-service soda fountain unit which has the ice cream service holes all in the front of the cabinet section to facilitate ease of "dipping" by fountain operators.

Weber Showcase & Fixture Co. showed a 20-ft. "Rollador" mirror-back ice cream dispensing cabinet, and a 3-sink model boottail soda fountain unit. Also shown was the 12-cu. ft. ice cream display and merchandising cabinet.

Automatic Bottle Dispenser

A selective automatic beverage dispensing unit was displayed by Ideal Dispenser Co. Equipped with a manual selector unit, the cabinet is said to hold 5 to 6 cases for dispensing with a 7-flavor range. A pre-cooler holds from 6 to 7 cases of beverages. Coin-operated, the unit is powered with a 1/4-hp. condensing unit.

Featured at the Dole Refrigerating Co. booth was a new ice accumulator, designed as a "storage battery" of refrigeration for peak load requirements in air conditioning and where ever water is used for cooling. The units consist of a battery of Dole vacuum plates submerged in water and in operation a portion of the water is frozen on plates resulting in an accumulation of latent heat in the form of ice.

The model LHS-100 is said to supply 200,000 B.t.u. with a 3-hp. condensing unit on 12-hour operation. Also shown was a miniature plate stand and plate bank and a new stainless steel truck plate.

Showing their complete line of standard and custom built soda fountain units, Robert M. Green & Sons had new features in stainless steel syrup jar covers, basket strainer sink waste units, sterilizer sink in boottail models and Formica backbar superstructures.

New Small Freezers

A 2 1/2 and 5-gal. ice cream freezer in both self-contained and remote models were displayed at the booth of Emery Thompson Machine & Sup-

ply Co. Also shown was a 10-gal. "Freon" and ammonia freezer, a mix storage box, and 70-gal. and 150-gal. hardening cabinets.

A new line of mirror-back self-serve ice cream cabinets and merchandising cases in 9, 13, and 20-cu. ft. models were shown at C. Nelson Mfg. Co. The units come equipped with superstructures featuring Vita-Vision illustrations. A complete line of boottail soda fountains, fountainettes, and ice cream cabinets from 2 to 12-hole were shown. Cabinet construction featured a new lid gasket, said to prevent condensate or "sweating." Plastic lids are optional on most ice cream cabinet models.

Schaefer Has 'Thermo-Lid'

The "Thermo-Lid," a new development of Schaefer, Inc., was highlighted at this company's booth. Designed, according to the company, to increase gallonage in ice cream merchandising, the new lid has two thicknesses of hermetically sealed glass which is encased in a standard rubber packer frame. It is claimed that the new lids will not scratch or warp. At present the lids are available only on new Schaefer cabinets and are not available for replacement.

Displayed at the Schaefer exhibit was the full line of ice cream cabinets from 2 to 12 hole, three dispensing models with superstructures, the "Clearview" line of self-serve cabinets, a stainless steel model cabinet, and the 6, 12, and 18-cu. ft. chest-type home and farm freezers. Feature of the freezer display was the new 11 1/2-cu. ft. upright model.

'No-Frost' Hardening Unit

Its "No-Frost" method of hardening ice cream was featured in the Niagara Blower Co. booth, which included some of the largest equipment shown to the dairy industry group. Niagara Blower Co. elements in this system are the "Aero-Pass" condenser and the Niagara spray cooler. Advantages claimed for this system are constant peak capacity, no interruption for defrosting, rapid and uniform hardening room temperatures, good control of air movement.

Another Niagara item with special application for the dairy industry is the Niagara "dual cooler," which (1) furnishes chilled sweet water for milk cooling; and (2) cools and holds the milk room at the proper temperature.

Ice cream merchandising cabinets in various sizes were featured by the Refrigeration Div. of Savage Arms Corp., along with an extensive line of ice cream cabinets, ranging from a 3-hole model to a 12-hole double-row model.

Tyler Merchandising Case

A new ice cream merchandising chest with slanted sliding doors to help eliminate frosting of the glass doors marked Tyler Fixture's exhibit.

This new model, which has 12-cu. ft. capacity, is 75 in. long and 54 in. wide, over-all. Ends of the cabinet and the dividers are refrigerated. Colored display panels on a superstructure mounted on the back of the cabinet are used to advertise the cabinet's contents.

Also exhibited by Tyler were an open-type frozen food display case with automatic defrosting, a standard full-length dairy reach-in refrigerator, and an open-type dairy products display case designed for self-service.

Vilter Mfg. Co.'s exhibit was featured by a scale model of its "Pak-Icer" for milk crate icing. Using



At the front end of this refrigerated milk and dairy produce truck is a Kold-Hold "package unit" complete holdover truck refrigeration unit. A baffle assembly covers the two holdover plates which form the upper part of the unit, while the condensing unit is in the box-like container at the bottom. It is designed for plug-in operation and builds up ample plate refrigeration for the average day's run in 8 to 10 hours.



Contrasting the old and the new in C. Nelson Mfg. Co. ice cream cabinets is Mrs. H. M. Levous, Renee Ice Cream Co., Newark, N. J. Mrs. Levous is holding the lid of a 50-year-old Nelson cabinet, while in the background is the 1948 version, finished in gold for the company's fiftieth anniversary.



Taking a "reading" on the coin-operated beverage dispenser shown in the Ideal Dispenser Co. booth is Harold P. Smalley, president of the company and Mrs. Roy B. Biddle.

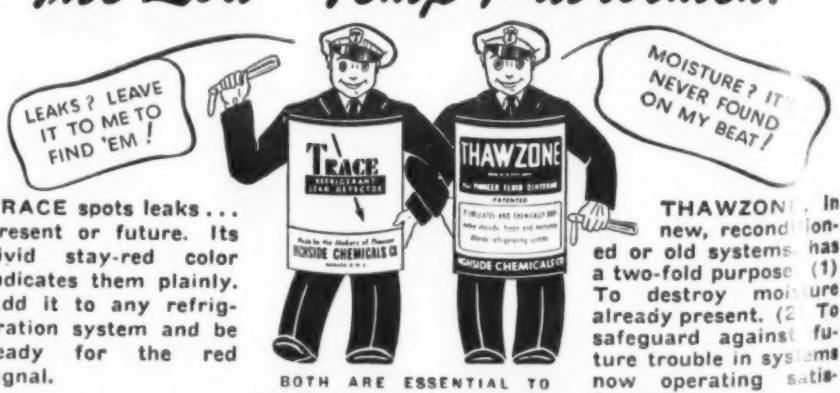
crystal form ice made by a Vilter ice-making system, the Pak-Icer consists of a redwood storage bin where the Pak-Icer falls by gravity from the freezer mounted above the bin. The whole system is started and stopped by a single control.

Prominent in the Mojonniere Bros. Co. exhibit was the "Lo-Temp" evaporator, for concentrating orange juices, etc. In this apparatus a new cycle has been created in which secondary compression apparatus controls the

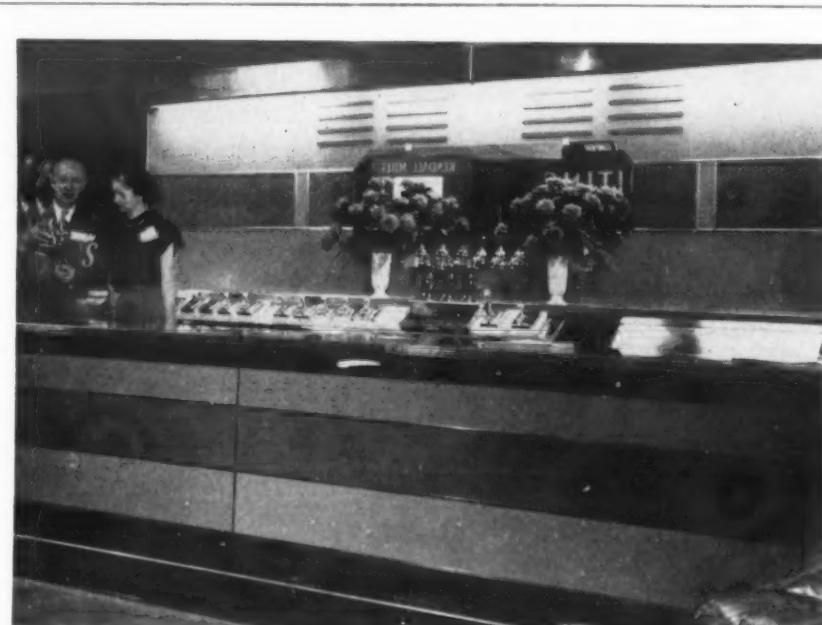
heat flow. This compressor equipment in the secondary cycle functions as a heat pump to re-cycle latent heat and obtain the economy of re-compression evaporation. This is said to result in the following advantages:

(1) Any evaporation temperature desired down to 40° F.; (2) Multiple effect evaporation at a single temperature; (3) Neither steam nor water used for evaporation (or distillation); (4) When used as still, complete recovery of condensate.

The Low-Temp Patrolmen!



HIGHSIDE CHEMICALS COMPANY
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The fine points of the soda fountain and backbar displayed in the Fischman Co. Dairy Show exhibit is explained by C. W. Hoffner, sales manager of the company, to Catherine Fries.

PALEY LO BOY REFRIGERATOR

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Makers of Aristocrat Refrigerator-Bar

New Vice President



A. H. BEHNKE

Hotpoint Elects Behnke To Head Materials Dept.

CHICAGO—A. H. Behnke has been elected vice president in charge of materials, by the board of directors, Hotpoint, Inc., James J. Nance, president, has announced.

The department was created during the past year and Behnke is the first company officer to head it, the announcement said.

Custom-Built Unit Boosts Druggist's Prescription Sales

ALBUQUERQUE, N. M.—Biological sales have risen sharply at the Pay-Less Drugstore here since a new storage refrigerator has been given "top billing" in the prescription department.

The drug shelving at the back of the prescription department has been remodeled to permit a convenient inset for the 8-cu. ft. refrigerator. This, a custom-designed model, has stainless steel drawers on two sides, sized to accommodate packets of insulin, penicillin, toxins and viruses, of up to 16-oz. sizes. Contents of each drawer are listed on a plastic-covered index card on the face of each drawer.

On the white door of the refrigerator is painted a bright red cross, with a list of the biologicals carried. Contrasting with the brown wood finish of the rest of the shelving, the refrigerator has caught the attention of many patients and physicians, who formerly were not aware that the store carried these drug lines, according to Abraham Cohen, pharmacist.

The drugstore arranges for dry ice and other refrigerated shipment of biologicals in large quantities to patients who live on isolated ranches and cannot easily reach Albuquerque.

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USE
CHICAGO SEALS
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VALVE PLATES

Precision lapping, superior construction and simple installation make Chicago seals ideal for replacement.

Only Chicago valve plates have replaceable seats.

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Garbage Disposers Would Require Additional Sludge Treating Facilities

ELMIRA, N. Y.—Additional sewage treatment facilities would be necessary in Elmira if use of kitchen garbage disposal units became widespread, Newell Nussbaumer, of Buffalo, sewer engineering consultant, reported to the City Council.

The council asked for opinion on the use of such units in Elmira. Corporation Counsel George H. Winer had reported use of the units is a violation of an Elmira ordinance.

"Since sludge treating facilities now are overloaded, any large contribution would accentuate present troubles," Nussbaumer wrote.

Conclusions he drew from experience reported in Washington D. C., Lansing, Mich., Goshen, St. Louis, and Gary, Ind., were:

1—Garbage solids would cause no trouble in sewer lines that are satisfactory in normal use.

2—They require increased sludge treating facilities.

3—If garbage was treated in the

plant Elmira uses now, there would be additional expenses for vacuum filtration and incineration.

4—Since sludge treating facilities now are overloaded any large contribution would accentuate present troubles.

5—Probably a small number of units would be installed in the near future, and the additional wastes would make little or no difference.

6—When a joint plant is installed, or when the present is remodeled, allowance can be made for garbage.

Kalamazoo Stove Declares 25-Cent Quarterly Dividend

CHICAGO—A dividend of 25 cents on the common shares, payable Nov. 1 to holders of record Oct. 19, has been declared by Kalamazoo Stove & Furnace Co. A like amount was paid in the two previous quarters.

Packaging Exposition Scheduled for May, '49

NEW YORK CITY—The American Management Association has announced that its 18th annual National Packaging Exposition, largest in the history of the event, will be held May 10-13, 1949, in the public auditorium at Atlantic City, N. J.

More than 200 exhibitors will utilize 110,000 sq. ft. to display developments in packaging, packing, and shipping machinery, equipment, materials, design, and services which are used in the manufacture and distribution of virtually every product in the nation's commerce, according to the association.

The annual four-day AMA Conference on Packaging, Packing, and Shipping will also be held in the auditorium May 10-13 concurrent with the exposition.

More than a thousand packaging executives, engineers, and technical experts will discuss the management aspects of materials, methods, procedures, in addition to merchandising.

Charge Neb. Beer Firms Give Away Refrigeration

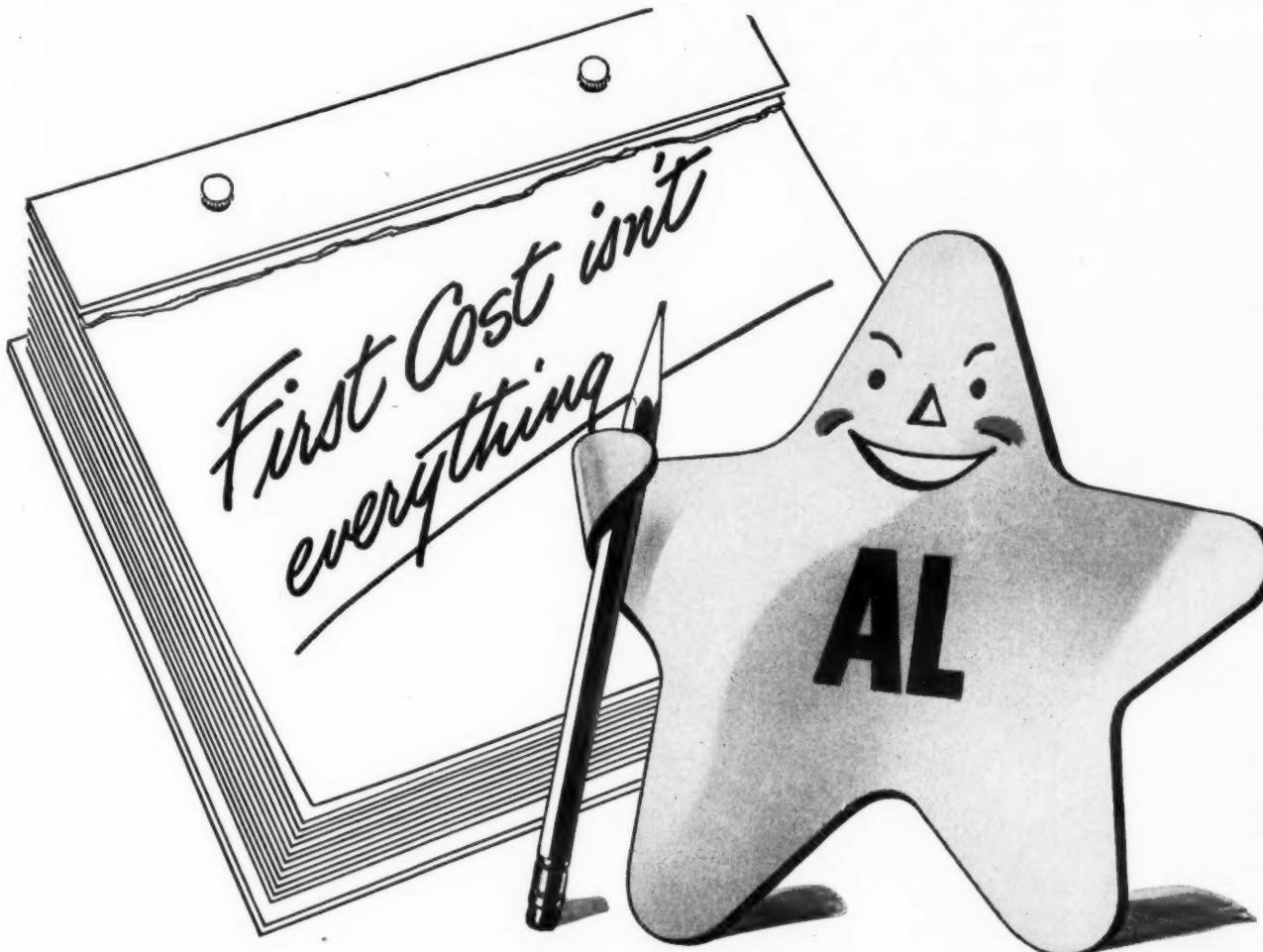
LINCOLN, Neb.—Ten Nebraska wholesale beer firms have been charged with giving refrigeration equipment or other "subsidies" to retailers in an effort to lure new business, and face possible revocation of their licenses in hearings before the State Liquor Commission.

Commission Chairman Richard E. Brega said the charges deal principally with "buying equipment for retailers," and he listed refrigeration equipment, tap boxes, etc.

The charges cap two years of investigation by Federal Alcohol Tax agents, Brega said. Federal agents gathered the evidence because "subsidization" is a Federal offense.

F. L. Jacobs Retires Stock

DETROIT—Retirement through open market purchases of 1,280 shares of F. L. Jacobs Co.'s \$50 par 5% convertible cumulative preferred stock, as provided for by the sinking fund was announced recently.



● First cost is often a minor matter.
Equipment made of Allegheny Metal lasts and keeps its beauty for a lifetime—cuts maintenance and depreciation costs to the bone. This pioneer stainless steel is really cheapest in the long run—and it's promptly available to your needs.

Complete technical and fabricating data—engineering help, too—yours for the asking.

ALLEGHENY LUDLUM STEEL CORPORATION

The Nation's Leading Producer of Stainless Steel in All Forms

Pittsburgh, Penna. . . . Offices in Principal Cities

Allegheny Metal is stocked by all Jos. T. Ryerson & Son, Inc., Warehouses



INSIDE DOPE

By GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

independent businessman—when the Democratic Party was in power, his sales volume was good—and vice versa.

"Dope" replied that during the same period when a Democrat was President (Wilson and Roosevelt) we went to war—and hastily pointed out that neither Political Party should be blamed for either tribulation.

Well . . . "Dope" didn't expect to receive the following rejoinder letters:

Editor:

I have read with considerable interest your "Inside Dope" column in the Oct. 11th issue of AIR CONDITIONING & REFRIGERATION NEWS. Besides being clearly informed on the issues you propound, I have definitely reached the conclusion that never will I take issue with your editorial words by way of an open letter.

I would certainly say that victory was yours completely.

Well done, my boy, well done.

(Name withheld on request).

Monroeville, Indiana

Editor:

You have given me what I consider to be an excellent opening again. Here it goes. In your column in the Oct. 11th issue where you answer Mr. Garvey, the Frigidaire dealer.



Best Selling! Best Serving! Best Value!

CHEVROLET Advance-Design TRUCKS

All over the country, the favorite trucks are Chevrolet Advance-Design trucks, and for good reason, too, for they're first in value. Compare them, feature for feature—value for value! You'll find they bring you more and cost you less, for Chevrolet trucks have 3-way *thrift—triple economy*—with low operating costs, low upkeep costs and the *lowest list prices in the entire truck field!* See your Chevrolet dealer.

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN



Check These Features! Only Chevrolet Advance-Design Trucks Have Them All!

Quicker, quieter and easier operation is assured with Chevrolet's new 4-SPEED SYNCHRO-MESH TRANSMISSION in one-ton and heavier models. Faster shifting maintains speed and momentum on grades.

Mounted on the steering column, the new Chevrolet GEARSHIFT CONTROL offers new convenience and ease in all models with 3-speed transmissions.

World famous for its outstanding economy, Chevrolet's powerful VALVE-IN-HEAD ENGINE provides IMPROVED durability and operating efficiency.

The revolutionary Advance-Design FOOT-OPERATED PARKING BRAKE provides new convenience and greater clear floor

area in models with 3-speed transmissions.

Heavy-duty models have greater strength and durability with Chevrolet's new SPLINED REAR AXLE HUB CONNECTION.

The Cab that "Breathes" • Flexi-Mounted Cab • UniWeld, All-Steel Cab Construction • Large, Durable, Fully Adjustable Seat • All-Round Visibility with Rear-Corner Windows • Heavier Springs • Super-Strength Frames • Full-Floating Hypoid Rear Axles on 1/4-Ton and Heavier Duty Models • Specially-Designed Brakes • Standard Cab-to-Axle-Length Dimensions • Multiple Color Options.

*Fresh air heating and ventilating system and rear corner windows optional at extra cost.

any more. People do not have a heritage to fall back on. This time when the flare-up comes what are we going to do?

Man was created, not made like a complicated piece of machinery.

Man has a soul and cannot be treated as a material thing in a cold calculating way.

Whenever it is tried things blow up in the perpetrator's face.

No one wants to see a return of good old fashioned Democracy better than I do. Dewey will never bring it back. He will only open up old sores again.

Mr. Garvey put forth an argument that millions of other Americans do put forth almost word for word.

Of course most of them don't care where the money comes from as long as they get it—but that also holds true for all too many men who should be above reproach on the conservative side of the picture.

We are sitting on a volcano. Just the time when we should have leaders of virtue they are almost totally absent. War and greed sure wreck havoc with a country and in our case the whole world.

J. K. Marquardt

Constant Checker-upper Marquardt has said a mouthful. So has another respondent, "Ted" Quinn who was, in "his day" the youngest man ever elected to a vice presidency of the General Electric Co.). "Ted writes us as follows:

T. R. Quinn Company, Inc.
Monitor House
New York 63, New York

Dear George:

May I join the editorial discussion between you and Mr. M. P. Garvey

of Milbank, South Dakota?

No one, I suppose, favors huge government of extravagant government expenditures, even though this year's \$11,000,000,000 and next year's probable \$15,000,000,000 are for armaments which the strange attitude of Russia appears to make unavoidable.

But you are not, in my judgment, striking at the heart of the matter.

The reason we have and must have big concentrated government and trade unions is that we have monster, economic industrial and commercial corporations.

Twenty years ago there were 22 billionaire private corporations in this country. Today, we have 48 of them which means that there is now a billionaire private "economic state" for every political state in the union.

It is idle to condemn big government while we have concentrated power and control in a relatively few monster private corporations, unless we are willing to have the latter in absolute control. We still have a vote in government but even stockholders in our monster corporations have no more control in them than Russian peasants. Moreover, the managements are self-perpetuating and officers are not elected but picked just as they are in the Russian politburo.

As early as 1942, there were 32 monster private corporations with greater wealth than 18 of the States in the union.

Have you seen the Federal Trade Commission reports showing how fast smaller business is being swallowed up or being made dependent by the monsters?

The trend toward the further concentration of power and control is accelerating and leading us toward some kind of collectivist state.

The pitiful Communists in our midst, and the highly publicized outside influence, are mere side shows compared to what is going on inside.

Within two or three weeks, I shall send you an advance proof of my book: "I Quit Monster Business," which undertakes to show how and why we are building a dependent society. If huge industry persists in making people dependent, it cannot avoid the cost of subsidizing and caring for them. Even the feudal barons of old took care of the people in return for their subservience.

T. K. Quinn

Answer: Both "Big City Feller" Quinn and Ruralist Marquardt have chosen to ignore the point of our debate with Mr. Garvey. Neither the Frigidaire dealer nor "Dope" discussed monopolies, Big Business, or Christianity-in-practice. How these two characters succeeded in reading into our argument these extraneous issues we'll never be able to figure out.

And as for the articulate Mr. Quinn: well . . . we await the opportunity to evaluate the arguments in his second book with uncontrollable eagerness. (Loyal readers of "Inside Dope" may recall that we operated on his first book "Liberty, Employment and No More Wars," without anesthetics—and that he pulled no punches in his reply.)

Wind-up of the Garvey Incident

From the deep-frozen Democratic South came this significant note:

Decatur Trade School
P.O. Box 311
Decatur, Alabama

Editor:

Please send me a number of copies of "Inside Dope" by George F. Taubeneck, if you have this available in reprint. This is from the Oct. 11, 1948 issue.

Reedy N. Armstrong
Instructor,
Refrigeration Department

And from Mr. Garvey himself:
Home Appliance Store
Milbank, S. D.

Editor:

Thanks for your reply to my recent communication, am not sorry I expressed my opinion of your theories. I am sure there are many of your subscribers who think the same as you, but there are some I can venture to state who do not agree.

You know government is for the people, and by the people, we must not forget that. Government was founded for the welfare of the whole people, not for the few, and you must admit if you are fair, and I think you are, that the welfare of

the majority of the people of the entire United States are enjoying that promised prosperity much better under the leadership of Roosevelt and Truman than under Harding, Coolidge and Hoover.

You will remember the dire prophecies predicted for the future after World War No. 2 ceased and how, under the present administration, it did not materialize, like it did following the Republican election in 1920.

So you are a Democrat, a Jeffersonian Democrat. Reminds me of the non-going church member, when asked why he didn't attend services, began a tirade against the clergy, he was this and he was that, he would not have anything to do with his church. Investigation showed that this clergyman came to the parish a few years previous, burdened with debt, small and irregular attendance at services, buildings in a run down condition, etc. etc. But now the indebtedness was all liquidated, the buildings put in good repair, the congregation had about doubled and everything as it should be, but this good former church goer would have no part in it.

If you nullify my argument that business and conditions are better under Democratic Administrations than under Repulican, and infer that that is not the reason for this prosperity, then you would have us think it didn't make any difference which party was in power. Your prediction that Dewey has the election "in the bag" is not shared by Mr. Dewey and his corporation attorney campaign managers.

Many predictions as you have made were also made in 1944. But let's try and get along, you may be right in your belief, but you may be wrong. I will be driving East soon, leaving Oct. 10, and may get to Detroit. Would like to meet a "big shot" editor for a change, suppose I could find you and yours?

M. P. GARVEY

Tax Report Plan Proposed By Gesick

Currently receiving serious consideration be the U. S. Treasury department is the thought that quarterly Withholding Tax Reports can be combined with Social Security Tax Forms—an idea not unfamiliar to Edward J. Gesick, Treasurer of Mills Industries, Inc.—who first proposed it.

Gesick suggests that "much of the detail in four quarterly reports to the Social Security Board could be eliminated. The procedure would be to put the information required by the Treasury Department under the Internal Revenue Codes for withholding taxes being collected by the employer as agent for the government in return for income tax purposes.

The reporting of the amounts paid and the amounts withheld from employees for Social Security and withholding tax purposes," he continues, "Could be made on the present form W-2.

"Improvements in the type of paper and the farsightedness of the men in the Treasury Department in approving one-time carbon forms W-2, permits expansion of these forms so that copies could be sent to the Social Security Board and other authorities."

Gesick contends that the adoption of this plan would result in the annual savings of millions of dollars to both government and industry.

Regrettable Oversight

Sherer-Gillett Co.
Marshall, Michigan

Editor:

In one of your recent "Inside Dope" columns we read with interest your listing from Dartnell's booklet on "Where to Eat."

Reedy N. Armstrong

Instructor,

Refrigeration Department

And from Mr. Garvey himself:

Home Appliance Store

Milbank, S. D.

Editor:

Since you ask for other nominations, I might add that as a result of our nomination the Hotel Schuler, Marshall, Michigan, was included in Dartnell's booklet. This isn't located in any of the large cities so that it missed out on the popularity vote, but I am sure that it would be rated close to Number One by any of your readers who may have dined there.

J. H. Wilson
Advertising Manager

P.S. This does not have reference to the dinner served our A.C. Club when you addressed it, although I believe that it was superior to the average club dinner.

Answer: Mighty right, Mr. Wilson. The Hotel Schuler in Marshall, Mich., serves an exceptionally good dinner, and definitely belongs on any list of America's Best Places to Eat.

Coolerator Names Rasa, Ryan, Wicklund, Willard District Sales Managers

DULUTH, Minn.—Appointment of four district sales managers to represent the Coolerator Co. in the St. Paul, Seattle, Cleveland, and New York City territories has been announced by William C. Conley, Jr., sales manager for the company.

The four appointees and their headquarters are Wayne Wicklund, St. Paul; John K. Willard, Cleveland; Emil Rasa, New York City; and Thomas H. Ryan, Seattle.

Wicklund joined Coolerator in 1934.

For several years he was a member

of the service department and was then appointed assistant to the sales manager.

In his new position, he will work with Coolerator distributors in North Dakota, upper Wisconsin, upper Michigan, Minnesota, Iowa, Nebraska, South Dakota, and South Dakota.

Willard, who has managed his own appliance distributorship in California since the war, got his start in the appliance field in Cleveland in 1923 when he went into business for himself.

His territory will include eastern Michigan and western Pennsylvania.

During the war, Willard was a lieutenant colonel in the Army Ordnance Dept., heading the administration of several large ammunition loading facilities.

Rasa, formerly sales promotion manager for the Times Appliance Co.

in New York City, has had nearly 20 years' experience in the electrical appliance marketing field. For over 17 years he was associated with the Westinghouse Electric Supply Co. of New York in various positions including eastern district sales promotion manager.

Rasa has also been national advertising manager for the Jackson Mfg. Co. of Brooklyn. He is a graduate of Pace Institute of Advertising, Marketing, and Selling.

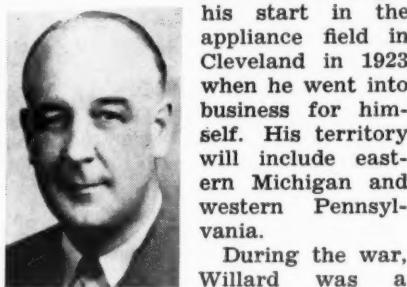
Rasa's territory includes eastern Pennsylvania and southern Connecticut.

Ryan, formerly west coast sales manager for Presteline appliances, has had 13 years experience in the appliance field on the west coast. Before the war he had served in the appliance departments of leading retailers in the area including Frederic & Nelson of Seattle. He has also been general sales manager for a commercial and home freezer manufacturer.

Ryan's territory will include the states of Washington, Oregon, Utah, Idaho, Montana, western Wyoming, and eastern Nevada.



Wayne Wicklund



John K. Willard



Emil Rasa

City's Meat Fresher as Butchers Heed Law on Adequate Refrigeration

BINGHAMTON, N. Y.—The purity and freshness of meat brought into Binghamton by Southern Tier butchers has improved markedly as a result of the city's new meat control ordinance which requires adequate refrigeration facilities in slaughter houses and retail stores, according to Dr. E. E. Brosnan, a health bureau veterinarian.

Dr. Brosnan said that 10 area butchers have spent many thousands of dollars on refrigeration and other equipment to comply with the ordinance which went into effect July 1.

Only three or four butchers chose to stop bringing meat into Binghamton rather than comply, Dr. Brosnan asserted.

To continue doing business in Binghamton the 10 compliers were compelled by the ordinance to install refrigeration equipment, hot and cold water of adequate pressure, and drainage systems in their slaughter houses.

Still in the beginning stage is compliance with a section of the ordinance regulating refrigeration and sanitary facilities in retail stores selling meat in the city. An educational campaign now is being carried on among 250 such outlets by the health department.

Many of these stores have adequate refrigeration chambers but inadequately cooled display counters. The health bureau plans to push this phase of the program much harder next year.

Apex Sales Advance to \$28.7 Million In 9 Mos.

CLEVELAND—Unit sales of Apex cleaners, washers, and ironers for the first nine months of 1948 totaled 438,690 as compared to 396,002 for the same period last year, C. G. Frantz, president of Apex Electrical Mfg. Co., has announced.

For the same nine months, net sales amounted to \$28,709,919 as compared with \$22,944,003 for the corresponding period of 1947. Net profits after taxes were \$1,494,312, or \$4.32 per share, this year as compared to \$1,178,991, or \$3.40 per share, last year.

For the quarter ended Sept. 30, 1948, net sales totaled \$9,230,351 and net profits after taxes were \$549,142, or \$1.59 per share. This compares with net sales of \$7,190,637 and net profits after taxes of \$381,206, or \$1.10 per share, last year.

City Committee Weighs 70° Heating Standard

MINNEAPOLIS—A proposed ordinance to set a 70° F. heating standard for buildings used in housing or business here is before the city council health and hospitals committee. The ordinance, however, excepts cold storage rooms or other businesses requiring low temperatures.

If passed, the ordinance will apply to all business establishments employing one or more persons during usual business hours, and to living quarters from 6:30 a.m. to 10:30 p.m., throughout the heating season from Sept. 15 to June 1.

May Co.'s 'Teen-Age' Promotion Program Aims At Creating Desire for Appliances 'In Advance'

LOS ANGELES—Noting the fact that many adult women of today are still unacquainted with such electrical conveniences as home freezers, garbage disposal equipment, the appliance department of the May Co. here is aiming to eliminate such situations in the future by a merchandising program aimed at "teenagers."

Under the program, Mrs. Margaret L. Anders, home service demonstrator for the May Co.'s appliance department, staged the opening gun with a 6-hour demonstration on "Modern Homemaking"—which was extended for the benefit of girls from 14 to 17 years of age. On the program was a demonstration of a modern automatic washing machine, with the girls trying their hands at loading and unloading it, a similar demonstration of a drier, separate demon-

Mechanical Refrigeration OK, But—

Belshaw Tells ASRE Only Cracked, Snow Ice Keeps Fresh Foods Fresh Satisfactorily

DETROIT—Stating that he "had no quarrel with mechanical refrigeration," Charles Belshaw of the Belshaw Mfg. Co. asserted before the Detroit ASRE recently that only cracked or snow ice really does a satisfactory job of "keeping fresh foods fresh."

"Any type of refrigeration is a great help," he readily admitted, but he predicted that "some day all fruits will be iced."

"It's only in the past years that anything's been done about maintaining the quality of fresh produce from the time it reaches the grocery store to the time it's served by the housewife," Belshaw declared in emphasizing the great care that producers and shippers take.

In urging that all retail stores display fruits and vegetables in cracked ice, Belshaw stated that "we sorely need a good mechanical ice maker that will make from 500 to 2,000 lbs. of ice a day which can be installed in the rear of a supermarket or grocery store."

Whether the market operator should buy his cracked ice from an ice plant or make his own would depend entirely on the economics of the question, he suggested.

"There's a vast difference," he said, "between using ice in direct contact with the product to be preserved, and using ice or mechanical refrigeration to cool air which in turn cools the product. You will note that cracked



Charles Belshaw, of Belshaw Mfg. Co., before Detroit ASRE, showing charts of tests on icing of fresh produce.

ice is used extensively for the preservation and display of fish and poultry."

Major contention of Belshaw was that cracked ice maintained the vitamin C content of the foods, as well as keeping their moisture content and appearance at high levels.

Describing the body icing of railroad refrigerator cars, and emphasizing that 95 to 98% of all fresh produce is still shipped in railroad cars with water ice as the refrigerant, Belshaw cited the following advantages for body icing:

"1. Maintains refrigeration at 32° F.

"2. Maintains 100% relative humidity.

"3. The melting ice absorbs the

gases of decomposition given off by the produce or fruits.

"4. Most air and oxygen are excluded from the produce.

"5. An individual wrapping effect is obtained."

Belshaw explained that "several years ago I became interested in the subject of preserving fresh foods which are going to be consumed fresh. The missing link in the chain of food handling from field to home, I thought, was in the grocery store....

"I venture that there are not more than 25,000 refrigerated display cases in use in the country's half-million grocery stores," he asserted.

Belshaw recalled his early investigations into the question of using cracked ice for fresh food preservation, beginning around 1938, indicating that what started out as a one-man proposition has developed into nationally sponsored research programs being carried on at 16 universities.

One of the major advantages of using ice in direct contact with fresh produce, he indicated, is that it drastically cuts the dehumidification of the foods.

"Everything that lives or breathes, including the foods we eat, is composed chiefly of water. We're just a few chemicals and a handful of vitamins floating in water."

Vacuum Cleaner Store Name Filed In Buffalo by Robbins

BUFFALO—A business name has been filed in the Erie County clerk's office for the Vacuum Cleaner Store, 838 Genesee St., Buffalo, by Sol Robbins.

And Now COILS
OF WOLVERINE WATER TUBE and
WOLVERINE REFRIGERATION TUBE
BOTH
IN CONVENIENT CARTONS

Every inch of Wolverine tubing is quality-controlled from ore to finished product. Its smooth, clean interior assures you of a dependable, uniform flow of fluids or gases. And you can feel confident, if you specify this tubing, that your customers will be extremely satisfied. Remember, there IS a difference in tubing.

EASY TO DISPLAY
EASY TO INVENTORY
EASY TO MERCHANDISE
EASY TO USE

Wolverine Water Tube Individually packaged in 60 ft. coils
 Wolverine Refrigeration Tube individually packaged in 50 ft. coils



WOLVERINE TUBE DIVISION
 CALUMET AND HECLA CONSOLIDATED COPPER COMPANY
 INCORPORATED

MANUFACTURERS OF SEAMLESS NON-FERROUS TUBING

1411 CENTRAL AVENUE

DETROIT 9, MICHIGAN

Marsden Warns Wholesalers

Inventory Appreciation Is Hidden Factor In Problem of Rising Costs, Shrinking Profits

By E. C. Marsden of Marsden & Wasserman, Inc., Hartford, Conn.
Address delivered at Rema-Rewa meeting, Oct. 22, 1948

If I were a radio commentator or a newspaper columnist, I would no doubt start in by shouting and proclaiming a terrific crisis which is imminent. But I think of a crisis as something that strikes very rapidly, and it seems that at the present time they are quickly forgotten.

There is a very definite trend in our industry which cannot and will not be quickly forgotten. Different from a crisis, it is slow and relentless. If it continues, it will engulf us—slowly but surely. I would like to discuss—a problem that faces every wholesaler today—the problem of increasing costs and diminishing profits.

Earnings Good, But—

I am afraid that there are a great many in this industry of ours who are very complacent and satisfied with the profits which they are apparently making at the present time. A quick look at any profit and loss statement will show that the earnings are as good or better than any year in the past decade.

This is really caused by the increase in value of our inventory between the time we buy an article and the time we sell it. This appreciation in value has given the wholesaler thousands of dollars of profit

which we enjoy at the present moment, but such a condition cannot long continue.

No wholesaler will be very happy, if he will deduct from his profit the appreciation of his inventory during the yearly period, together with the additional profit he has made while the goods have passed through his operation due to increase of prices.

Gross Profit Up Only 2.56%

If these two conditions are eliminated—and it is really only one condition—we will very quickly be faced with this serious problem of decreased profits and increased costs of doing business.

Our problem has already shown itself in a recent survey made by our association. This survey, in spite of rising prices and with inventories priced mainly at today's market, only showed an increase of 2.56% in gross profit.

This is entirely due to the fact that during this same period, the survey showed an increase of 19% in overhead and a decrease of 29.5% in net profit. Both wholesalers and manufacturers must realize that a definite trend has already set in, and face this situation before it is too late.

In the conduct of our own individual business, it is our initiative and

good business sense which alone can control certain expenses which are a large part of our overhead. We must carefully control the total amount of salaries we pay, by employing only the number of people in our organization that are considered essential to the proper functioning of our operation.

I am not in favor of lowering wages, but the number of employees must be kept to a minimum. Excellent employee relations are developed by paying larger individual salaries and having fewer employees.

We must always be careful about buying more buildings, more trucks and automobiles, and covering more territory either by additional salesmen or branch stores. All these items increase our overhead very rapidly, but I repeat that these items are entirely under our control.

Markups Fail to Rise

Unfortunately, there are some items in our profit and loss statement over which we have no control. We can certainly control our gross profit to a large extent by not cutting prices, but there is another side to our gross profit which we cannot control.

One of our serious problems is the items that we must sell at the same 4 cents per lb. or \$4.00 a dozen gross mark up that we enjoyed five years ago.

There are too many items that we sell where our gross dollar profit remains the same regardless of an increase in price.

Even worse than this condition are a great many items where the percentage of gross profit has been decreased even with an increase of selling price. We have a few instances where the resale price has not increased when the wholesaler dollar cost has increased.

There are also other factors that vitally affect our net profit over which we have no control, and I would like to point out a few of these.

Growing Freight Bills

On the books of my company, we have an account called "Freight Paid." This is incoming freight only, and has nothing to do with the delivery from our warehouse. When material comes into our inventory, and we cannot pass on to the customer the freight which we pay on the shipment, we charge the amount to this account.

In the year of 1944 this account amounted to only \$4,000 while in 1941 it was only \$1,400. In 1946 this account increased to \$10,800, in 1947 it became \$18,100, and in the first six months of 1948 it had already exceeded \$10,700.

This has become a very important part of our cost of doing business, and the increase is of course entirely out of proportion to the increase of our dollar sales.

I would like to quote to you from a letter we received from one of our sources of supply only recently. Nearly every wholesaler in this room buys from this manufacturer and I consider his letter an insult to our industry.

"Over the years there has been a considerable increase in freight rates and it now becomes necessary to sell f.o.b. our factory with no freight allowance. Increased labor costs and material costs also necessitate this move."

May I repeat—"Increased labor costs and material costs also necessitate this move."

No Bearing on Individual Acts

The "Pittsburgh Base" and the "Cement Case" have nothing to do with this letter. I am not here today to argue about the rulings of the Supreme Court of the United States.

I doubt if there are two lawyers in the country who would argue on the exact meaning of these decisions, but I do know this, neither the Pittsburgh Base nor the Cement decision have any bearing on the individual act of any person in business.

An individual's selling price can be

At the recent joint meeting of the Refrigeration Equipment Manufacturers Association and Refrigeration Equipment Wholesalers Association in French Lick, Ind., E. C. Marsden, a director of the wholesalers' group, spoke frankly on some matters that are currently affecting the wholesaler's profit picture. The News presents the text of Marsden's talk for the benefit of those who did not have the chance to hear it.

anything he cares to make it—if he makes it as an individual—and his price can be freight paid, freight allowed, or freight collect.

It is impossible for the wholesalers to absorb the freight bills of this country. All of us, whether manufacturers, wholesalers, or retailers, must include the cost of transportation in our selling price.

The logical method—at least in my mind—is that each one of us should pay this transportation to its immediate destination. The manufacturer should include in the selling price of his product the cost of transportation of his product from his plant to its first stop. No court has ever said that this could not be done.

Steel Formula Unique

I would like to make one comment here which may qualify the last point I have made. In arriving at the selling price of steel, a wholesaler uses a rather complicated formula which involves the freight paid from the mill. I know of no other product except steel where such a formula is used to arrive at a selling price.

And now I would like to point out one more thing that vitally affects the net profit of a wholesaler. I would like to call your attention to cash discounts. I believe that there should be some reward for prompt payment by a wholesaler.

The wholesaler who pays his bills promptly should have an advantage over the wholesaler who is slow. The discount rate on bank loans should have no bearing on the cash discount. It is foolish for me to borrow at the bank for discounting if I cannot make a profit by doing it.

Discount for Promptness

Only sound and substantial wholesalers have the privilege of borrowing at the bank, and only wholesalers in a strong position have the ability to discount their bills. I repeat that those who do pay promptly should have a dollar advantage over those who are slow to pay.

In the case of my own company, which covers a rather broad activity in the heating as well as the refrigeration field, we have seen the cash discount we have taken become smaller and smaller until it is now less than one-half of 1% of our sales volume.

Part of our sales are made up of boilers, radiators, pipe or fittings, all of which still carry a 2% cash discount, so that it is very evident that other material which we purchase carries a very small or else no cash discount. This is particularly true in the refrigeration industry.

I firmly believe that the manufacturers would enjoy a much better collection record if they would offer a reward for prompt payment. The wholesaler would be very happy if he could earn an additional 2% on his purchases by promptly paying his bills.

No Right to Lower Profits

The first point that I would like to make is that we have seen a great many increases in price in the past few years. The wholesaler's cost of doing business has also gone up during this period.

I do not think that any manufacturer has the right to decrease the wholesaler's profit in order to arrive at a lower resale price in the primary market.

The wholesaler's suggested resale prices must carry at least as much profit percentage wise as they formerly did.

It is not my intention to stand up here and name a few manufacturers who have tried to meet and solve the problems which I have listed. Very recently there are a few who have tried to help us meet our problems. This is particularly true in the case of freight charges.

We must all remember that the wholesalers furnish a very large sales organization for the manufacturers. The wholesaler must be assured of a profit for this selling job or else he cannot function. It is a nationwide industry problem.

Alodized

"Alodine" solved the problem of paint durability on aircraft. Alodizing provides excellent paint adhesion as well as unusual protection for the metal.

Photograph courtesy of Stinson Division, Consolidated Vultee Aircraft Corp.

"Alodine" solved the problem of paint durability on aircraft. Alodizing provides excellent paint adhesion as well as unusual protection for the metal.

Photograph courtesy of Stinson Division, Consolidated Vultee Aircraft Corp.

Alodized
ALUMINUM
(Coated With "Alodine")
ANCHORS THE FINISH
PROVIDES A NEW ORDER
OF DURABILITY IN METALS

"Alodine" is effectively applied by dipping -- in simple immersion equipment; by spraying -- in power washer equipment; or by brushing.

In 2 minutes or less--and at low cost -- "Alodine" develops on aluminum a highly protective corrosion-resistant coating and an excellent paint bond. No electricity is required and the bath operates at a low temperature. Alodizing is adaptable to either small or large plant operation -- to either continuous or intermittent production.

For a lasting paint bond and the utmost in metal protection, specify Alodizing and Alodized aluminum. Write or call for further information.

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DAVISON *Refrigeration Grade* **SILICA GEL**

DAVISON PA 100 Refrigeration Grade Silica Gel

PROCESSED ESPECIALLY FOR THE DEHYDRATION OF REFRIGERANTS

You can rely absolutely on PA-100 to give instant refrigerant drying to well below the level where freeze-up damage can occur. You get the plus advantages of dust free drying—maximum dryer capacity—freedom from caking, channelling and corrosion. No wonder PA-100, Davison Refrigeration Grade Silica Gel is . . . the drying agent most widely demanded and used by refrigeration engineers.

ASK YOUR JOBBER for dehydrators charged with PA-100, Davison Refrigeration Grade Silica Gel . . . he also stocks it in bulk in the can with the blue label.

*T. M. Reg. A. For

THE DAVISON CHEMICAL CORPORATION
Progress through Chemistry

BALTIMORE-3, MD.

PIONEERS AND DEVELOPERS OF SILICA GEL

Canadian exclusive sales agents for DAVISON SILICA GEL: CANADIAN INDUSTRIES LIMITED, Sales Division, Chemical Group

Pre-Packaging 80% of Produce Items Cuts Spoilage Loss, Ups Profits for Maine Store

PORTLAND, Me.—A smoothly operating produce pre-packaging system, whereby 80% of the items sold in the produce department come to the customer neatly packaged and priced, has shown many profit-making advantages for the George Shaw Market in downtown Portland.

The Shaw store, a long respected institution here, has extended the packaging program to cover many produce items heretofore handled only in bulk. Included are grapes, lettuce, beans, onions, peaches, celery, squash, Brussels sprouts, carrots, tomatoes, cabbage—in addition to the more common items which are pre-packaged.

"Customers are gradually coming to expect pre-packaging in almost every food line," Harold Durocher, head of the store, asserted. "Because of experience with self-serve meats, delicatessen products, and baked goods, we have found that the same idea seems to work out well with produce."

"Many customers will pick up a neat package of tomatoes, head lettuce, or grapes where they will not bother to pick up the same item shown in bulk form. They appreciate the convenience and ease of handling."

"In addition, careful packaging, we have found, eliminates spoilage altogether, and thus does away with a serious profit leak."

The pre-packaging system begins with two 8 by 10-ft. walk-in Peerless refrigerators in the basement, one kept cooled to 38° F. and another at 41° F. Realizing that the secret of successful packaging and display appeal lies entirely with quality produce, the store handles nothing but premium grades, which are carefully precooled before packaging begins.

Directly in front of the refrigerators is the basement pre-packaging room, which is equipped with heat sealers, sheet cellophane, cartons, tape, and labels, for six wrapper employees. There are also two scales, on which each package is weighed out and priced by the head wrapper. Durocher has three women and three

men on the crew, who have other duties upstairs, when not packaging.

The amount of packaging done is pre-indicated by sales in the first-floor produce department. Packages vary sharply, ranging from rigid cardboard scoops in which grapes are placed, and then sealed over with cellophane, to mere heat-sealed cellophane wrappers around lettuce, sections of squash, etc.

Bananas are taped together in bands, while most other produce items are tightly wrapped in cellophane and heat sealed.

All produce is carefully washed, culled, and inspected before packaging, after which it is weighed and priced, and moved by conveyor to a first-floor outlet, which is concealed beneath a glassed-in crushed-ice stand, on which seasonal produce is featured.

"We naturally have a lot of va-

riety in the packages sent upstairs," Durocher said. "The variety of shapes and sizes makes it possible to work out interesting displays."

Except for the dry racks to the right of the main display fixture, all produce is kept iced in the main food store. A large octagonal fixture, 8 ft. broad, is equipped with a glass panel, 12 in. high, around eight sides.

This is topped with a 6-in. layer of crushed ice, and both packaged and non-packaged produce is displayed here.

Formerly the Shaw store purchased crushed ice from a local ice plant, but for economy, recently installed a York ribbon-ice maker, which is mounted in a room at the rear of the store.

Ribbon ice is discharged from the machine and fills up a bin which will hold more than 100 lbs. It is a simple matter to transfer a steel wheelbarrow-type cart up to the produce room for re-icing the stock.

Due to closely-watched refrigeration and the use of top-quality produce, spoilage has almost vanished from the Shaw store, according to Durocher.

LIFETIME PRECISION!

Bulletin 837 Temperature Controls

Give accurate control for a long period because of their simple, rugged construction. The temperature of the surrounding air does not affect the setting. Available in different ranges between -50 F and 500 F with remote bulb and capillary, with immersion bulb, or in a room thermostat. Pilot duty rating is standard, but ratings up to 1 1/2 hp at 220 volts are also available.

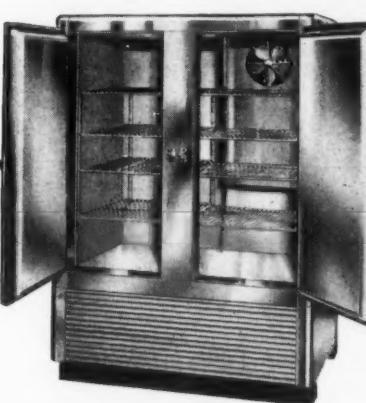
ALLEN-BRADLEY CO.
1313 S. First St. Milwaukee 4, Wis.

ALLEN-BRADLEY
MOTOR CONTROL

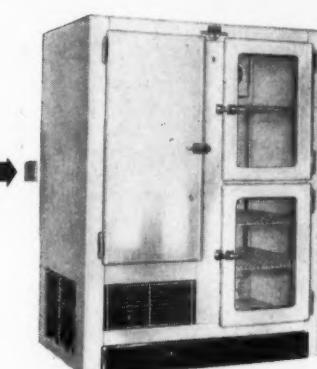


FOLLOW THIS LINE FOR GREATER PROFITS

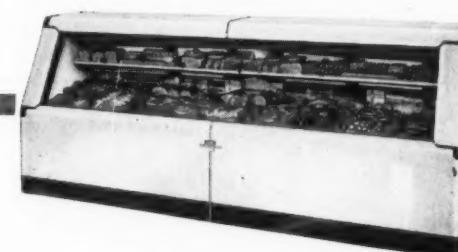
It's the Koch line of quality refrigerators we're talking about... the line that has meant profit and satisfaction to dealers and users alike since 1883! There is a Koch refrigerator for nearly every type of commercial use. Look at the models shown here... then get the inside story on this profit line without delay. You'll agree. The line of least resistance is Koch!



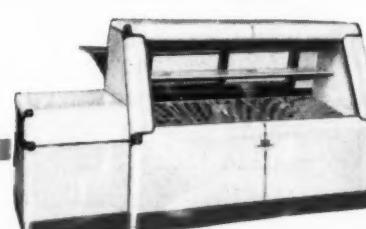
25 cu. ft. stainless steel refrigerator, welded into one compact unit. Nothing like it, anywhere, for durability and quality. Also made with ice-maker unit.



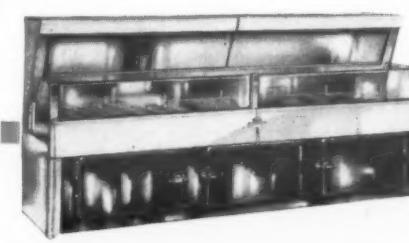
42 cu. ft. self-contained reach-in refrigerator with Dulux exterior, porcelain interior. Either glass or solid doors. Big, beautiful, and economical to own and operate.



Double duty models 6 to 12 feet long and top display models 10 and 12 feet long. Every one is welded steel, with porcelain exterior and display. K-Beam lighting, Miraflex coils, triple-plate glass front, and heavy, solid insulation.



A 6-ft. long self-contained case with compressor housing. Miraflex coils, K-Beam lighting, and full porcelain exterior and display.



Open front 10-ft. long display case for self-service display of fresh pre-packaged meats, produce, dairy products, delicatessen, and bottled goods. All steel, inside and out.



A 65 cu. ft. self-contained refrigerator with unlimited use. Glass or solid doors. Profitable for storage and display of foods, bakery products, flowers, bottled goods, dairy products. Interior porcelain lined.

MORE CALLS BETTER SERVICE BIGGER PROFITS



WITH DEPENDABLE HINSDALE HIGH SPEED REFRIGERATION SERVICE SET

27 PIECE SET WITH THESE OUTSTANDING FEATURES

- All tools drop forged of highest quality chrome alloy steel
- Special "Dura-Temp" heat treated for maximum strength
- Famous HINSDALE "Satin-Tone" finish makes tools Rust-Proof
- Packed in heavy metal case 5 1/8" x 5 3/4" x 1 1/8"

Designed specifically FOR mechanics BY mechanics, here is a complete refrigeration service kit containing the important "sockets" needed by the refrigeration repair man to handle every repair job. All tools are precision built and engineered especially for ease in handling exacting refrigeration repair problems. This Master Mechanics Refrigeration Service Set includes 19 HINSDALE super quality Square Drive and Packing Gland sockets—size 5/16" to 1 1/8". Available in either 3/8" or 1/4" drive. Also included are short Box Wrenches and Handles. Comes all packed in heavy metal case, 8 1/8" x 5 3/4" x 1 1/8". The perfect answer to better service and bigger profits. Order TODAY.

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KOCH Refrigerators

NORTH KANSAS CITY 16, MO. Since 1883

Write Koch today for details, open territories, and complete proposition.

They'll Do It Every Time . . . By Jimmy Hatlo



Do You Have 'One Foot In the Door'?

3 ways to win

THE COMPETITIVE DOG FIGHT IN EVAPORATIVE COOLING

by L. P. HANSON, M.E.
VICE PRESIDENT, USAIRCO



This is a lot of important news to crowd in a page advertisement. But if you'll mail the coupon below to Don Groth, pictured here, you'll receive news of the most sensational dealer program in the Evaporative Cooling field.

usAIRco has set up its subsidiary, the Great National Air Conditioning Corporation, with plants at Dallas, Corsicana, and Minneapolis as its Evaporative Cooling Division.

To Great National usAIRco has assigned 3 outstanding properties . . . 3 great Evaporative Cooling Units . . .

And it has created for Great National a product program and a selling program that will put Great National distributors and dealers in a position to win leadership . . . and infinitely more important to make money.

Consider this . . .

There is no competition to De-Hu-Matic. Nothing even remotely approaches this sensational development "zoned evaporation". Wouldn't you like to handle it locally?

Evaporative Kooler-aire with Gyro-Spray is still regarded by the industry as the magic worker in the Evaporative Cooling field.

Kold-aire is going to be mass produced, quality-built and competitively priced. Let them shoot at it. They won't come close.

In every class you'll be able to stop them dead. Here are 3 ways to make more money.



MAIL THE COUPON
GET THE COMPLETE STORY

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A Subsidiary of United States Air Conditioning Corporation
342 Oklahoma Natural Bldg., Oklahoma City, Okla.

Great National Air Conditioning Corp.
A Subsidiary of United States Air Conditioning Corporation
342 Oklahoma Natural Bldg., Oklahoma City, Oklahoma

- Please send me more details about the Evaporative Cooling program.

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Address _____

City _____ State _____

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VOLUME 55, NO. 10, SERIAL NO. 1,025, NOVEMBER 8, 1948

Congratulations, Salesman Truman!

PRESIDENT TRUMAN'S stunning upset victory at the polls should be taken to heart by every man who has a selling job. Here was a fellow who was counted out by everyone *but himself* before the race even began. He had to lick not only the Republicans but his own party. Practically nobody helped him. He did it himself. Here's how:

He saw the people and told his story.

And he kept on telling and selling, 18 hours a day, right up until the last minute.

He saw far more "prospects" than all his rivals put together. Truman is not a gifted natural salesman. But *he called on the most "prospects."* And he never quit. Nobody else had confidence in him or in what he was selling. But he did. Overwhelming as were the odds against him, he kept his self-confidence, and he kept on selling.

And he won.

You can't beat that as a lesson for everyone who sells anything.

See the people!

Soda Fountain Market

ONE of the lusher markets for commercial refrigeration dealers is the rich soda fountain business. It is a big market, and a money-maker for both the soda fountain operator and the soda fountain dealer.

American soda fountains ring up on their cash registers an annual volume of better than \$1,000,000,000.

(N.B.: There were between 125,000 and 140,000 soda fountains in operation in the United States when the last U. S. Business Census was taken. Undoubtedly many more are in operation today.)

In 1944, one nationwide survey revealed that more than 50% of America's refrigerated soda fountains were 10 years old or more.

Including conventional fountains and coolers, bobtail fountains, refrigerated backbar bases and refrigerated salad units, it is estimated that nearly 69% of these specialized refrigerators are over-age.

To the basic replacement market for these items—plus the prospects for brand-new soda fountains—must be added the opportunities for added profits represented by the important accessories sold by the comparatively few commercial refrigeration dealers who handle soda fountains—such as carbonators, dispensing units and faucets, etc.

Where are new soda fountains installed?

Answer: In an infinite variety of places. At least 33% go into drugstores, another 33% into confectionery stores, about 12% in restaurants, maybe 5% in variety stores, and surely 17% or more in small "eateries" and refreshment stands.

Nearly all of these prospects for soda fountains and freezers would roll out the red plush carpet for the well-informed refrigeration salesman, who can show them how a new fountain can increase their sales and save them money.

In addition to these eager prospects, it must be remembered that department stores are putting in soda fountain installations, too, and many another type of business (like "dime stores") which have a large traffic flow of customers.

Who is getting the replacement business in this potent market for specialized refrigerators? Who is selling brand-new installations of fountains, refrigerated backbars, salad units, the carbonators, the dispensing units to this palpitating prospect list?

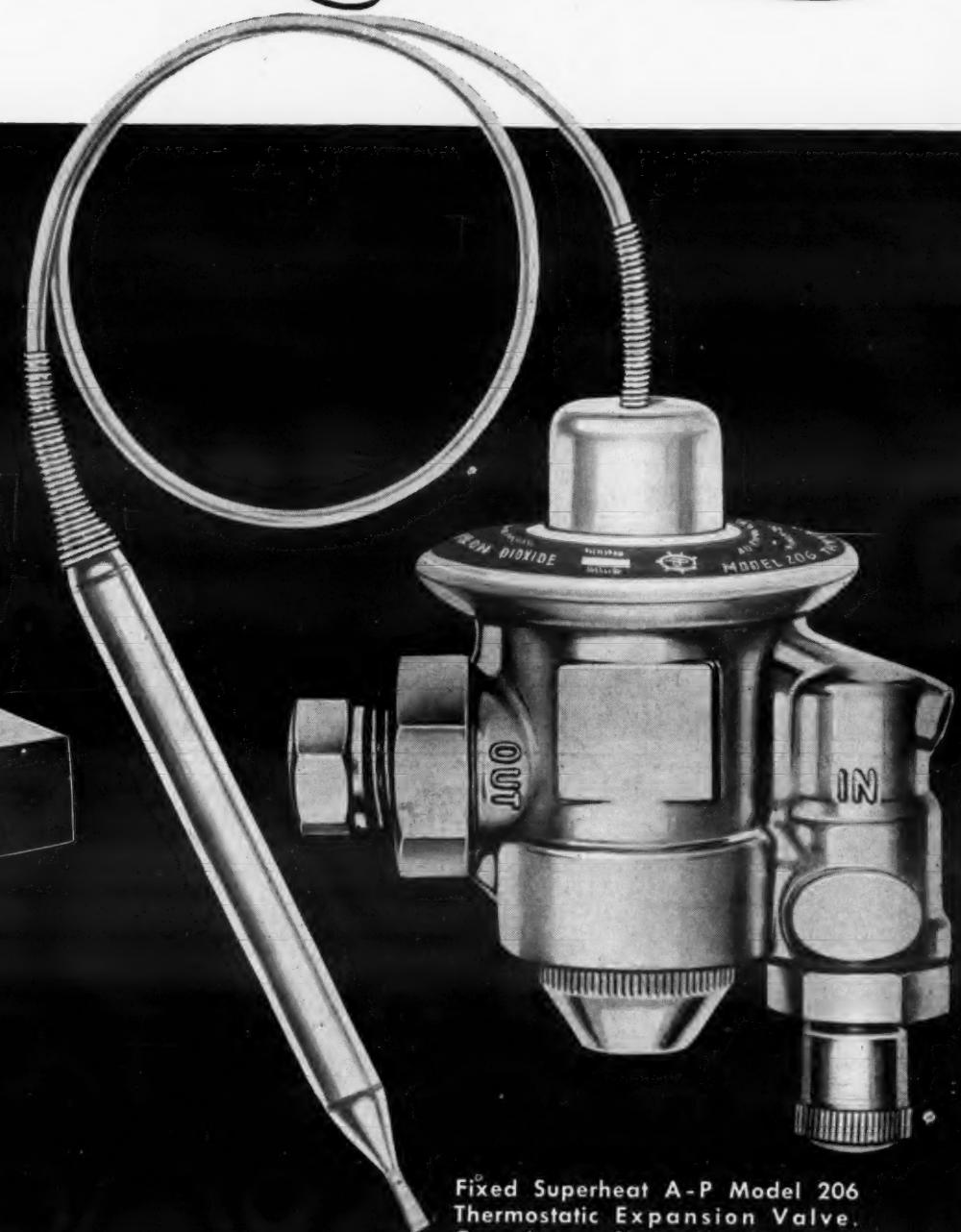
Answer: A decidedly limited number of dealers, distributors, and manufacturers. Others might well look into it.

Recognized DEPENDABILITY

DEPENDABLE
Through Years
of Field Proving



Model 206
(FIXED SUPERHEAT)
Thermostatic
Expansion Valve



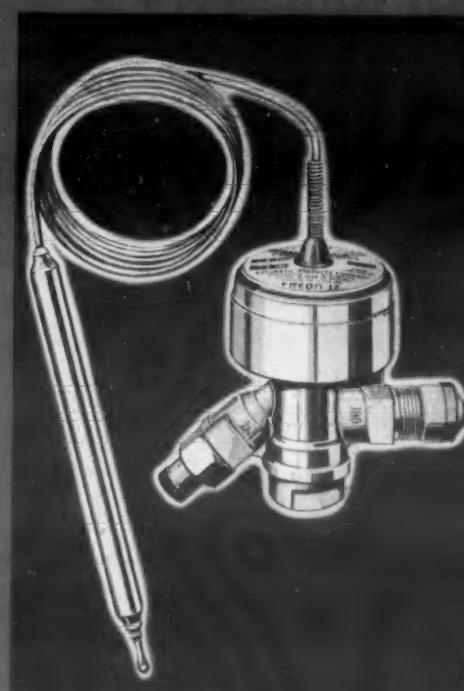
Fixed Superheat A-P Model 206 Thermostatic Expansion Valve. Capacity — $\frac{1}{4}$ to $\frac{1}{2}$ ton Freon, $\frac{1}{2}$ to 1 ton Methyl or Sulphur.

Time-tested choice of thousands of manufacturers and engineers, A-P Model 206 is today one of the industry's top favorites among $\frac{1}{2}$ -ton valves. Factory set at the desired superheat, it is tamper-proof, and no further field adjustments are necessary — a distinct advantage on many systems. You'll find it dependably controlling such equipment as large domestic units, water and beverage coolers, display cases, freezers, air conditioners and similar units.

Like all A-P Expansion Valves, the Model 206 maintains a constant superheat over a wide range of evaporator temperatures, less than $\frac{1}{2}^{\circ}$ variation over a range of operating temperatures from minus 30° to plus 50° F. Popular both as original equipment and as replacement, it is compact, simple to install. Valve body can be mounted in any position or ambient temperature. Depend upon the Model 206 — for your small-tonnage needs!

New A-P Model 211 Fixed Superheat Valve with Limiting Pressure Feature

Protects systems against motor overload by limiting operating suction pressure to predetermined setting. May be used in place of any standard fixed superheat valve of similar capacity. Capacity, $\frac{1}{2}$ and 1 ton Freon 12, or Methyl. Types available to limit pressures to 15, 40, and 55 lbs. Freon 12; 10 and 30 lbs. Methyl.



AUTOMATIC PRODUCTS COMPANY

Export Department, 13 East 40th Street, New York 16, N.Y.
2450 NORTH THIRTY-SECOND STREET • MILWAUKEE 10, WISCONSIN



DEPENDABLE *Refrigeration Valves*

STOCKED AND SOLD BY GOOD REFRIGERATION WHOLESALERS EVERYWHERE . . . RECOMMENDED AND INSTALLED
BY LEADING REFRIGERATION SERVICE ENGINEERS.

R300

"For the HOTTEST DEAL in Town"

Dealers Say It Everywhere

The Modern • Efficient • Economical

"NAT"
SUSPENDED
GAS UNIT
HEATERS

3 sizes to suit all
requirements 75,000-
110,000 and 165,000
BTU Capacity.

Available for Natural,
Butane, Propane, or
Manufactured Gases.

Delivery within 3 days
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Some exclusive terri-
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Models 75 and 110 ap-
proved by the American
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ESTABLISHED SINCE 1929

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How To Service Room Air Conditioners (10)

Checking of Electrical Circuits Outlined

CHECKING COMPRESSOR ELECTRICAL CIRCUIT

The entire electrical circuit can be checked with a relatively few simple tests and in most cases does not even necessitate removing any of the wires from the motor terminals.

TESTING EQUIPMENT

1. Test lamp with 200-watt bulb.
2. Test starting set (motor protector, relay, capacitor, and leads).
3. Wattmeter.
4. Voltmeter.

TEST VOLTAGE

Be sure "motor control" knob is turned to "cool." Also be sure you are using full voltage and proper frequency as shown on the chassis data name plate and that there is current all the way to the motor.

The line voltage should be checked during the starting cycle of the unit; also, during peak loads from other sources. This may lower the voltage considerably and would designate too small a wiring circuit, in which case it would necessitate rewiring either the entire circuit, or a separate circuit for the air conditioning unit directly to the meter and fuse box.

TEST MOTOR WINDINGS

Test the wall outlet or disconnect switch with a test lamp for the presence of voltage. If after determining there is voltage to the electrical terminal block and the unit still fails to start, check as follows:

SHORTED WINDINGS

Warning—It is essential that the power supply to the unit has been disconnected for this test.

To test for shorted windings, it will be necessary to place a piece of corrugated cardboard or a piece of wood $\frac{1}{8}$ -in. thick between the relay contact points.

With the test lamp plugged into the outlet, place the test clamp "A" on one of the motor terminal leads and test clamp "B" on the compressor housing, being sure to obtain a good contact.

Try all three terminals in this manner and if the test lamp fails to glow on all combinations, it designates the windings are not shorted. A shorted winding shows with a glow to the bulb of either a greater or lesser degree.

OPEN WINDINGS

With the test lamp still plugged into the outlet and the unit still disconnected from the power supply, place test clamp "A" on the center motor terminal and test clamp "B" on each of the other terminals in succession. If the light does not glow, the winding is open. If it glows on any combination possible, the windings are not open.

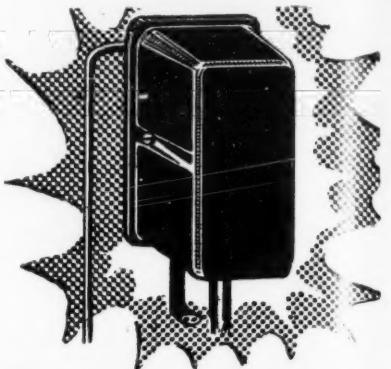
TEST FOR STALLED MOTOR (WITH THE TEST STARTING SET)

After you have tested the motor windings as prescribed and find them in good condition, continue to test as follows:

With the contact points of the starting relay still blocked open, attach the three covered leads of the test starting set to the three motor terminals.

If there are no internal troubles, the motor should start and continue to run. This proves the failure is not within the sealed housing; therefore, it will be necessary to test the original starting capacitor, relay, motor protector, and running capacitor also for loose connections or broken wiring. This test set can be purchased from the manufacturer.

(To Be Continued)



The McCary Signal Light

Prevents Refrigeration Losses
Needs No Servicing
Absolutely Foolproof

Ideal for use on walk-ins, reach-ins, display cases, ice cream cabinets, soda fountains, home freezers, floral boxes, refrigerated trucks, etc. Adjustable from -10° to +60° F.

Contact your local wholesaler

McCARY MANUFACTURING CO.
2823 Mobile Street El Paso, Texas

FOR SALE

225 NEW CONDENSING UNITS

$\frac{1}{3}$ h.p. Hermetic, Medium Pressure Condensing Units. Designed for Beverage Coolers, Reach-In and Similar Applications.

United Iron & Metal Co. Inc.
Catherine Street & B & O RR
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WANTED

REFRIGERATION ENGINEER

By West Coast Manufacturer

To operate laboratory for Refrigeration development and testing. Must be thoroughly experienced in Commercial Refrigeration. Engineering degree required. Write giving full details.

Box 2987, Air Conditioning & Refrigeration News

**

MARLO "WATER-MISERS"**

HAVE SERVED 10 YEARS AND MORE

...BECAUSE

MARLO SEALS CORROSION OUT!

Sump tank, base, frame, wheels and scrolls of every Marlo Cooling Tower and Evaporative Condenser are hot dip galvanized. As added protection, the hot dip galvanized scrolls and all panels are also coated with asphalt-asbestos mastic.

The sturdy, simple construction of these quality units gives them the stamina to go on saving up to 95% of normal water costs and consumption year after year after year.

For lasting economy specify...

*MARLO COOLING TOWERS and EVAPORATIVE CONDENSERS

MARLO-HEAT TRANSFER
Since 1925

This 100-ton Marlo EC-100 Evaporative Condenser with multiple-circuit coil, installed on the roof of the Palace Bowl, 4925 Southwest Ave., St. Louis, handles the entire air conditioning system for the huge 24-lane bowling alley, adjoining restaurant and cocktail lounge.

MARLO COIL CO. / ST. LOUIS 10, MO.



more per-unit profits with

NEILSON direct draw BEER DISPENSERS and BEVERAGE COOLERS

Exterior of cabinets are finished in heavy gauge metal, brown hammertone finish.

Beer Dispensers available in two, three, and four keg sizes. Each Cooler equipped with glass chilling compartment.

Beverage Coolers available in four, six, and eight foot lengths... equipped with stainless steel disappearing doors.

- Positive, fast, economical cooling.
- Available for either self-contained or remote installations.
- Sturdy, all steel cabinets.
- Forced draft refrigeration.
- Convenient, fast, efficient operation.

NEILSON

EQUIPMENT COMPANY

717 South Date Ave., Alhambra, Calif.

Export Office—328-332 Parkway Building, Pasadena, Calif., U.S.A.

Detroit Group Sees 7.5-Hp. Hermetic Unit

DETROIT—A 7½-hp. hermetically sealed condensing unit was exhibited to Detroit servicemen and contractors here last week by the Copeland Refrigeration Corp.

Carl Buschmann, chief engineer for Copeland, who escorted the unit to its Detroit showing at a meeting sponsored by Joe Oberc, parts wholesaler, stated that this was the first time that the unit had been taken out of the laboratory.

Buschmann said that Copeland also has ½, 3, and 5-hp. Copelametic units in the laboratory stage and expects to have them in production early next year. He stated that a 1-hp. Copelametic condensing unit is already in limited production.

Buschmann declared that Copeland's aim was to develop a Copelametic line ranging from ½ to 7½ hp. that would correspond to its belt-driven open-type condensing unit line.

He told the servicemen and contractors that Copeland, like all other manufacturers, had experienced difficulties in the immediate postwar years in maintaining a standard product due to the poor quality of materials received. But now, he asserted, Copeland is operating with greatly improved production and inspection methods.

He pointed out that experience with rigid government inspections during the war has taught the company a great deal about close tolerances and precision manufacturing. These lessons, he asserted, are being incorporated in the production plans for the larger size Copelametic units.

Dale Bodine, service manager for Copeland, accompanied Buschmann. He showed slides on the production of condensing units at the Copeland factory and on the company's complete line of condensing units. He also described the outstanding features of the line.

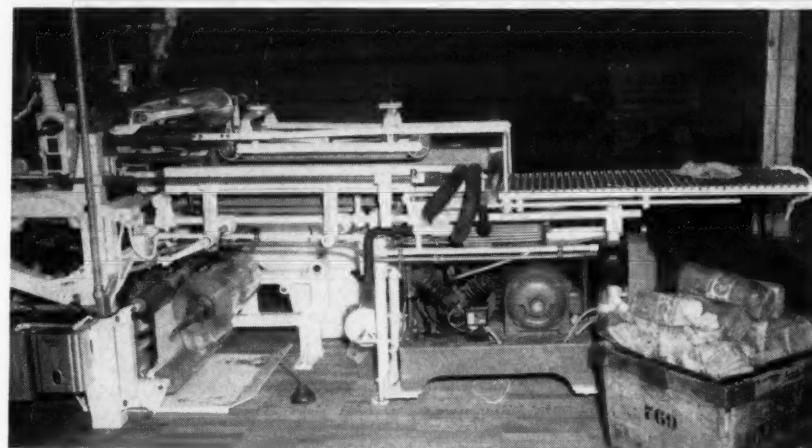
During his talk, Bodine said there are approximately 750,000 Copelametic units now in the field. He recalled that the first unit of this type was turned out in 1940 and that 150,000 were produced before the war stopped production in March, 1942. Production was resumed in the latter part of 1945.

This meeting was the second in a series of monthly sales promotional meetings being conducted by Oberc through the winter. Most of the meetings are expected to be held in Oberc's own new auditorium that was built into his new plant here.

Davidson's Quarterly Profit Equals 83 Cents Per Share

BALTIMORE—Operations of Davidson Chemical Corp. for the September quarter resulted in a net income of \$428,000, equal to 83 cents each on 514,134 capital shares, compared with \$593,000, or \$1.15 a share a year ago, Chester F. Hockley, chairman and president, reported at the recent annual meeting here.

Half-Second Cooling Solves Packaging Problem



Above is the refrigeration equipment as it is utilized on the bread wrapping machine at the Miller Hi-Q Bakery, Denver.

* * *

Refrigeration Hastens Bread Wrapping In Bakery Using Heat-Sealed Cellophane

DENVER—Using refrigeration to insure a good seal on cellophane bread wrappings has made it possible for the Miller Hi-Q Bakery here to turn out 50 perfectly wrapped loaves of bread per minute.

Before the refrigeration equipment was installed, high-speed wrapping had raised a serious problem. As the cellophane wrapper passed through the wrapping machine, it was heat sealed. But at the 50 per minute rate, the sealed ends often came open, necessitating much hand work and rejects.

To get around this difficulty, the bakery's management, headed by M. Miller, had two 36-in. long cold plates installed on either side of the conveyor belt which draws the wrapped bread from the machine.

Powered by a 1½-hp. condenser, the two plates remain at 35° F. or lower. As the bread slides between them, fresh from the heat sealer that closes the package ends, the cold

Hart Will Head Warren Refrigeration Engineering

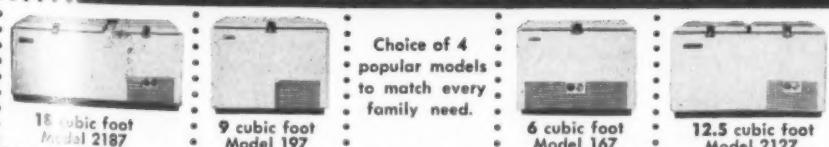
ATLANTA—Thomas H. Hart, formerly a sales engineer with the Detroit Lubricator Co., has been appointed chief refrigeration engineer of the Warren Co., Inc. here. Hart will have charge of the Warren engineering laboratories and service school.

A new engineering building that will house the laboratories is expected to be completed within the next year, according to the company. Test rooms in the laboratories will be equipped with the latest electronic devices for perfecting commercial refrigerator units.

Thomas H. Hart

next year, according to the company. Test rooms in the laboratories will be equipped with the latest electronic devices for perfecting commercial refrigerator units.

BEN-HUR Dealers Enjoy A 4-to-1 SALES ADVANTAGE in FARM and HOME FREEZERS



You turn prospects into customers faster with the BEN-HUR Freezer franchise! You can offer every prospect COMPLETE LINE CHOICE...a BEN-HUR freezer that matches exactly the needs of any family in your community—with 6, 9, 12.5, and 18 cubic foot cabinets that hold from 300 to 900 lbs. of frozen food.

Each of the FOUR popular BEN-HUR Models takes the lead in modern styling, convenience features, food freezing and storage efficiency—and operating economy... And in the home they promise customer enthusiasm through longer years of food savings and better meals.

Help EVERY Family
"Slash the High Cost of Eating!"

with a BEN-HUR Freezer...
BEN-HUR MFG. CO.

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Molded nylon is the seat material for which the valve industry has been searching for years.

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- The easiest shut-off in the field.
- Phosphor bronze and stainless steel diaphragms.
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- No Springs.

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If readers have any questions or problems concerning the application of air conditioning, they are invited to write to Mr. LaSalvia, who will be pleased to furnish a complete answer. There is no charge.

Selection of Water Cooling Coils (Cont.)

PROBLEM NO. 4

This problem is in every respect the same as preceding Problem No. 3, with the exception that this is being figured for a by-pass system.

All assumptions as made in Problem No. 3 will be used in Problem No. 4.

A part of this problem has been illustrated under the by-pass method, previously discussed, from which we get the following information:

Temperatures of air mixture entering the coils are:

D.B. temperature 83.0° F.
W.B. temperature 68.6° F.
D.P. temperature 61.0° F.

Temperatures of the air as it leaves the coils must be:

D.B. temperature 58.6° F.
W.B. temperature 57.0° F.
D.P. temperature 56.0° F.

Also the following:

Total air 8,600 c.f.m.
By-pass air 400 c.f.m.
Coil air 8,200 c.f.m.

Assumptions from Problem No. 3 are:

Velocity of air through the coils 500 f.p.m.
Entering water temperature to coils 46° F.

Water temperature rise through coils 10° F.
Water temperature leaving coils 56° F.

Amount of water required 54.5 g.p.m.

$$\text{Coil air velocity } \frac{8,200 \text{ c.f.m.}}{500 \text{ f.p.m.}} = 16.4$$

sq. ft. of face area.

Referring to Chart 5 we can use 24 tubes in the face, with 6-ft. length of tubes and having 16.5 sq. ft. of face area.

Air in	83.0° d.b.
Water out	56.0° F.
	—
Air out	58.6° d.b.
Water in	46.0° F.
	—
	12.6° d ₂

Referring to Chart 3 the Med. is 18.5.

Now referring to Chart 1, the 24-tube face unit with 54.5 g.p.m., shows the water velocity through the tubes to be 2.8 ft. per second.

Now using the velocity of 500 f.p.m. and water velocity of 2.8 f.p.s. and referring same to Chart 2 the "K" factor is 162 B.t.u.

The latent heat factor is the same as in Problem No. 3, or .92.

Therefore:

(H) 216,044 B.t.u./hr. (sensible heat)

$$162 \times 16.5 \times 18.5 \times .92 = 4.8 \text{ rows deep.}$$

Use the next commercial size water coil which is five rows deep.

The water-cooling coil to use in this case is one No. 85 c.t., five rows deep, having 24 tubes high in the face. The coil has 16.5 sq. ft. of face area and a nominal tube length of 6 ft., and has over-all dimensions of 37 $\frac{1}{16}$ in. high and 6 ft. 8 $\frac{1}{2}$ in. long.

It is obvious that if the coil temperature and velocity are held the same as in Problem No. 3, less air is passed through the coil, and the same amount of work has to be accomplished, so that the face area of the coil will be smaller and the depth of the cooling coil will have to be greater.

WATER COOLER AND REFRIGERATION CYCLE

The water cooler and refrigeration cycle for this problem is in every respect the same as in Problem No. 3, and therefore, Fig. 5 would apply to this problem also, with the exception that the air temperature leaving the cooling coil is 58.6° F. instead of 59.8° F. as shown in diagram.

PROBLEM NO. 5
This problem is to select the water-cooling coils to extract both sensible and latent heats for the theater system as described under "Refrigeration Storage." For this system we have the following information:

a. Total internal sensible heat	302,600 B.t.u./hour
b. Duct and fan losses	30,260 B.t.u./hour
c. Total sensible heat gain	421,960 B.t.u./hour
d. Internal latent heat	198,000 B.t.u./hour
e. Grand total heat gain	686,060 B.t.u./hour
f. Total air quantity	20,000 c.f.m.
g. Outside air	5,500 c.f.m.
h. Recirculated air	14,500 c.f.m.
i. Temperature of water entering coil	45° F.
j. Temperature of water leaving coil	50° F.
k. Amount of water through coils	274 g.p.m.
l. Inside design conditions	80° d.b., 67° w.b., 50% r.h.
m. Outside design conditions	95° d.b., 75° w.b.
421,960 B.t.u.	
n. "ST" ratio	$\frac{421,960}{686,060} = .62$

686,060 B.t.u.

STEP NO. 1

Determine percentage of outside and recirculated air.

$$\text{Total air supply } \frac{20,000 \text{ c.f.m.}}{5,500 \text{ c.f.m.}} = 100.0\%$$

$$\text{Outside air } \frac{5,500 \text{ c.f.m.}}{20,000 \text{ c.f.m.}} = 27.5\%$$

$$\text{Recirculated air } \frac{14,500 \text{ c.f.m.}}{20,000 \text{ c.f.m.}} = 72.5\%$$

STEP NO. 2

Determine temperature of air mixture entering coils.

$$(95^\circ \times 27.5\%) + (80^\circ \times 72.5\%) = 84.1^\circ \text{ d.b. temperature}$$

$$(75^\circ \times 27.5\%) + (67^\circ \times 72.5\%) = 68.5^\circ \text{ w.b. temperature}$$

Referring to the psychrometric chart, the dewpoint temperature is 60.5° and has 78.8 grains per pound.

STEP NO. 3

Determine temperature of air which must enter the fan.

$$332,860 \text{ B.t.u.} \times .925$$

$$80^\circ \text{ d.b. } \frac{20,000 \text{ c.f.m.}}{198,000 \text{ B.t.u.} \times 1.44} = 64.5^\circ \text{ F.}$$

$$77.3 \text{ grs. } \frac{20,000 \text{ c.f.m.}}{198,000 \text{ B.t.u.} \times 1.44} = 63.1 \text{ grs./lb.}$$

$$63.1 \text{ grs./lb. is } 54.5^\circ \text{ d.p. temperature.}$$

In accordance with previous discussions, having a 10° difference between d.b. and d.p. temperatures, it requires a by-pass system.

STEP NO. 4

Determine saturation temperature "Y."

By applying the following points:

$$84.1^\circ \text{ d.b. and } 60.5 \text{ grs./lb.}$$

$$64.5^\circ \text{ d.b. and } 63.1 \text{ grs./lb.}$$

to the saturation temperature curve chart, the saturation temperature "Y" is 49°.

Using 49° as the w.b. temperature and at 90% r.h., the d.b. and d.p. temperatures can be obtained from the psychrometric chart.

The quality of the air which must leave the coil in this case is:

$$\text{D.B. temperature } 50.5^\circ \text{ F.}$$

$$\text{W.B. temperature } 49.0^\circ \text{ F.}$$

$$\text{D.P. temperature } 48.5^\circ \text{ F.}$$

$$\text{R.H. temperature } 90.0\%$$

STEP NO. 5

Determine amount of air which must pass through the coils and bypass.

$$421,960 \text{ B.t.u.} \times .925 = 14,000 \text{ c.f.m.}$$

(84.1° — 50.5°)

The amount of air through the coils is 14,000 c.f.m.

The amount of air through the bypass is 20,000 — 14,000 = 6,000 c.f.m.

STEP NO. 6

Determine face area of cooling coils.

According to Table 1, with an "ST" factor of .62 the velocity of air through the coils should be about 340 f.p.m.

$$14,000 \text{ c.f.m.} \text{ Coil air } \frac{14,000 \text{ c.f.m.}}{340 \text{ f.p.m.}} = 41.4 \text{ sq. ft. of face area.}$$

Referring to Chart 5, we can use two coils, 24 tubes in the face with 7 $\frac{1}{4}$ -ft. length of tubes, each having 20.70-sq. ft. face area, making a total of 41.4 sq. ft.

STEP NO. 7

Determine the MED.

$$\text{Air in } \frac{84.1^\circ}{50.5^\circ} = 1.67$$

$$\text{Water out } \frac{50.5^\circ}{45^\circ} = 1.11$$

$$34.1^\circ \text{ d}_1$$

$$\text{Air out } \frac{50.5^\circ}{45^\circ} = 1.11$$

$$\text{Water in } \frac{45^\circ}{40^\circ} = 1.12$$

$$5.5^\circ \text{ d}_2$$

Referring to Chart 3, the MED is 15.5.

STEP NO. 8

Determine "K," B.t.u. per sq. ft. face area per deg. MED per row per hour.

Using two equal coils as figured in Step 5, if the required water capacity for both coils is 274 g.p.m., then each coil would use $274 \div 2 = 137$ g.p.m. for each coil or section.

Now referring to Chart 1, we find the water velocity through the tubes as 7.1 ft. per second.

Referring to Chart 2, with 340 f.p.m. air velocity and 7.1 f.p.s. water velocity, we find the "K" factor to be 148 B.t.u.

STEP NO. 9

Determine the latent heat factor.

The "ST" ratio is .62 and referring to Chart 2, again we find the latent heat factor to be .88.

Continuous Tube Coils

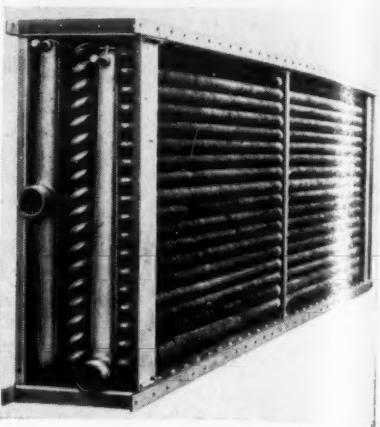


Fig. 7 shows a six-row continuous tube water coil with the front end cover removed. Note the supply header on the left side.

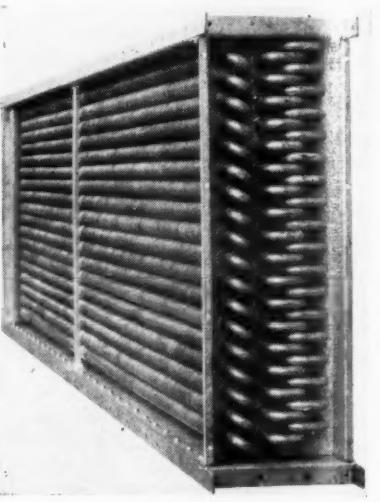


Fig. 8 shows the back end of a six-row continuous tube water coil with end cover removed.

STEP NO. 10

Determine rows deep of cooling coils.

$$421,960 \text{ B.t.u.} = 5 \text{ rows}$$

$41.4 \times 15.5 \times 148 \times .88$ deep.

This particular problem would require two No. 85 24-tube face, continuous tube water coils, one above the other, having 7 $\frac{1}{2}$ -ft. nominal tube length and each having 20.70 sq. ft. face area or a total of 41.40 sq. ft.

AEROFIN WATER COILS

Aerofin continuous tube water coils are built with $\frac{5}{8}$ in. o.d. tubing having fins $\frac{1}{32}$ in. deep and eight fins per inch which are metallically bonded to the tubes.

These coils are made from two to six tubes deep, causing the water to flow in opposite direction to airflow.

These standard continuous tube coils are shown in Figs. 7, 8, and 9 and are recommended for use with water only.

A full circuit water coil has 12, 18, or 24 tubes in the face (depending upon whether the coil is a 12, 18, or 24-tube face coil) in parallel connected into the supply and return headers.

These coils are for working pressures up to 200 lbs. hydrostatic and 220° F. temperature.

(To Be Continued)

'Before and After' Shots Fill Salesman's Presentation Book, Help Him To Sell Old-Style Homes on Remodeling Kitchen

PORLAND, Me. — Any kind of residential area, no matter whether boom times exist or not, can be sold complete package kitchens successfully, say partners Bob Lamy and Jeff Hodges, of Hodges Appliances, Inc., a Hotpoint dealership here.

For more than 18 months, the firm has been installing an average of at least one all-electric kitchen of a week—ranging from \$1,000 up to \$4,000. Hodges' kitchens are almost a byword in Portland, largely as the result of heavy publicizing of every installation, and the fact that the firm backs up the slogan, "kitchen specialists," with a consistent advertising program.

The secret of this heavy volume lies entirely in going about promotion in the right way, according to Hodges, who was an executive with a chain of auto supply stores before teaming up with Lamy to open the appliance store in 1945.

"When we started out to promote the package kitchen, we were discouraged left and right," he reported. "Our city isn't undergoing the housing development which other cities are. Incomes are not up a great deal, although prices have risen sharply."

"Nevertheless, when we got in our first shipments of components of all-electric kitchens, we were enthusiastic enough to make it a specialization."

THEY HANDLE WHOLE JOB

Making an advance investigation in 1946, Hodges found that the No. 1 requirement for selling big-ticket kitchens would be the ability to handle the entire job of remodeling existing kitchens, designing modern types to fit, and contracting the whole installation. Portland's ancient homes, many more than a century old, offered a tough problem due to the variety of materials, sizes, and shapes.

Next, Hodges found, there needed to be some way to show the average Maine housewife what could be accomplished with remodeling without actually taking her from house to house by automobile.

"We were fortunate in that we had a factory representative for St.

Charles living in Portland," Hodges said. "Through him we were able to secure not only a complete St. Charles model kitchen for our store, all connected for operation, but also an engineer-draftsman able to draw up the same specifications for any kind of remodeling job, and quote accurate estimate prices. Right from the start we knew that was our worst problem."

The kitchen display and the drafting office went into the Hodges store simultaneously. Meanwhile, Lamy was arranging with three service mechanics employed by the store to turn in tips on outmoded kitchens in return for a 1% commission on each sale. This, incidentally, has proved a prolific source of worthwhile leads.

Next, he hired two outside salesmen to follow up leads from previously-sold appliance customers, newspaper advertising, Dodge reports, and plain ordinary "cold canvassing." Each salesman was put through a kitchen-planning course at company expense, which enables him to size up an old kitchen and give an approximate estimate on modernizing it.

2-MAN TEAM FIGURES COST

Here's how the Hodges system works:

Each outside salesman handles tips from servicemen, old customers, etc., and when the contact is made, brings the St. Charles-trained draftsman along. The two figure cost and make sketches, from which a set of plans are drawn up. The plans are taken out by the salesman again to close the sale.

Then, after the papers are signed and the kitchen installed, a home economist calls to show the housewife how to use her new kitchen appliances to best advantage and to encourage her to invite her friends in to witness the demonstration. Many new prospects are secured in this way.

Installation in jig time is insured by teaming up with a construction contractor who has a plumber, electrician, gas-fitter, etc., all on the same payroll.

"We handle every installation

through this firm on a cost-plus basis in return for a guarantee of three-day service," Hodges said. "We supervise the whole job, make sure that only topnotch workmanship and materials are used, and co-operate with the contractor by making sure that the right materials are there at the right time.

"The whole job is covered under the estimate, and we make good ourselves on any unforeseen expense or details. It's all in the specifications we use to close the deal, and we stick tightly to the original estimate."

PURCHASER GETS PHOTO

A stunt which Hodges credits with dozens of new kitchen sales is the fact that the store photographs "before and after" shots of each kitchen. It makes up three prints of the picture, one of which goes into a sales presentation book, the second into the store file, and the third to the owner of the new kitchen.

The pictures, since they deal with local people whom the prospect may know, go a long way toward convincing the doubtful home owner that his old home kitchen may be remodeled into a smart, modern, time-saving variety.

Frequently, the before and after shots show how the firm handled the same problems worrying the homeowner, and clinch the sale on sight. Each salesman carries leather-bound album of these pictures, and swears by them as the No. 1 selling tool of the system.

Prominently featured in this prize-winning window display of the Coast to Coast Store in Boone, Iowa, is a Leonard refrigerator. Entered in the hardware and appliance store group of the Brand Names Foundation Window Display contest, this layout was awarded second place.

Window Display Wins 'Brand Names' Award



Advertising by Rochester Appliance Store Uses Customer Testimonial Letters To Build Prestige

ROCHESTER, N. Y.—Ralph Appliances, Inc., here uses testimonial letters from its customers in newspaper advertisements as prestige builders.

A recent advertisement carried a letter from Mrs. Marvin Spaulding which read:

"Having had unhappy experiences with previous automatic washers, I still entertained some doubts as to the capabilities of all automatic washers until I purchased one from Ralph Appliances.

"I am delighted with the design

of the washer to begin with and its many excellent mechanical features. I like the live-water action and the fact that no job is too big or too small for it. It is a tremendous relief to know that the finished clothes show no wear or tear and the method of starching makes the clothes so nice and new looking."

"Thanks again for selling me the washer. Its time-saving and reasonable price have amazed my whole family. My husband wonders how you could afford to give such a large allowance for my old washer."

"Same insulation they use in the best commercial refrigerator cases!"



IT WORKS BOTH WAYS

"Same insulation they use in most home refrigerators today"



**...a swell feature to have
...a swell feature to sell**



**OWENS-CORNING
FIBERGLAS**
THERMAL
INSULATION

Dell Music & Appliance Co. Incorporates In Buffalo, N. Y.

BUFFALO—Dell Music & Appliance Co., Inc., has been incorporated here with capital of 200 shares. Incorporators of the new company are Aaron Yasinow, Joanne B. Bauder, and Lea J. Rosen.

Net income in the first three quarters of this year totaled \$83,893,459, equal to \$2.91 a common share, compared with \$62,466,626, or \$2.17 a share, in the corresponding period of 1947. Sales in the 1948 period amounted to \$1,137,935,052, against \$821,221,142 in the same period last year.

Wilson said earnings in the first nine months this year were equivalent to 7.4 cents per dollar of sales, compared with 6.8 cents in 1947. The company realized 7.2 cents profit on each dollar of sales for all of the year 1947.

General Electric's third-quarter report, announced at the same time, showed a net income of \$29,291,120, or \$1.02 a share, compared with \$19,664,551, or 69 cents a share, for the third quarter of 1947. Sales in the third quarter this year were \$365,173,260, against \$327,578,332 in the same quarter of 1947.

Though third-quarter sales were up 4% from a year ago, they were still 10% below those for the second quarter this year "due to vacation shut-downs of our plants," Wilson noted.

IEEDA Survey Indicates Need for Aggressive Selling In Spokane Area

SPOKANE, Wash.—Not nearly so many consumers even intended to purchase appliances this year as intended to purchase them last year, a survey of the local market made by the R. L. Polk Co. has revealed recently.

Figures from the survey, as reported by the Inland Empire Electrical Dealers Association, showed that where 15% of local families intended to purchase refrigerators during 1947, only 8% intended to purchase them in 1948.

On other appliances, the drop was as follows: ranges from 15% to 8%, washing machines from 18% to 7%, ironers from 4% to 2%, vacuum cleaners from 15% to 6%, radio-phonographs from 10% to 5%, and radios from 10% to 2%.

"These figures do not add up to a saturated or declining market," the electrical dealers' association commented.

"They do indicate, however, that fewer and fewer customers are going to walk into stores to buy without having their interests stimulated by aggressive merchandising and salesmanship."



Orley Appoints Pakistan Distributor



M. Azid Bakhsh (left), newly-appointed distributor in Pakistan for Orley freezers, goes over features of the Orley "Super-Seven" with M. J. Solomon, Orley's chief engineer.

Pakistan Distributor To Set Up Orley Freezers' 1st Sub-Assembly Plant

DETROIT—Appointment of the A. B. Akram Co. of Lahore, Pakistan, as distributor for Orley freezers in Pakistan has been announced by Orley Freezers, Inc. here.

Azid Bakhsh, one of the brothers operating the Akram Co., has just completed a course in the production and assembly of Orley freezers at the factory here and is returning to Pakistan this month to take charge of the distributing operation.

Bakhsh will also set up a sub-assembly plant there—the first for Orley—to assemble the freezers. The freezers will be sent to him in knocked down condition and will require only seam welding to make them ready for operation, the company said.

Bakhsh, who has been in this

country since 1946 studying business administration at several colleges, declared that he felt that there would be a good market in Pakistan for home freezers.

He pointed out that Pakistan is largely an agricultural country and that a great deal of the food it raises spoils because of inadequate storage and preservation facilities. He felt that in Lahore particularly the large government worker class and hotels, restaurants, and food stores would be logical markets for freezers. He said that it would take a great deal of educational work, however, before appreciable sales would result.

Bakhsh served as a bomber pilot officer in the Royal Indian Air Force during the last war and was a member of the Lansing flying club during his stay at Michigan State College in East Lansing.

The Akram firm has been in business as an exporter and importer since before the war.

The Orley line is the first refrigeration equipment it has handled.



Yes, Yes, a thousand times...YES

Want to save time, trouble, and profit-making call-backs on your refrigeration control replacements? Then make the Cutler-Hammer refrigeration control catalog your standard guide on replacements. Here you will find "specific-fit" units which are not merely listed but already manufactured by Cutler-Hammer for more than 1,000 individual refrigerator models which the industry has produced since 1925. No "modifying", no fussing, no compromises, when you put in C-H "specific-fit" replacement control units. And you'll also quickly see how the widely-known Cutler-Hammer name

advertised in The Saturday Evening Post, Time, Newsweek, American Home, Better Homes & Gardens, House & Garden, etc.) builds customer confidence and good will. The C-H refrigeration control catalog, as well as the items you need, are available through your authorized C-H refrigeration wholesaler. Do not forget, this C-H refrigeration control line includes the outstanding general purpose replacement control (9521N9) for use with motors having "built-in" overload protection. CUTLER-HAMMER, Inc., 1362 St. Paul Avenue, Milwaukee 1, Wisconsin.

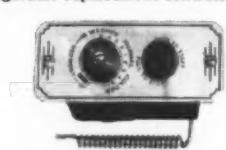
Here are typical examples from the broad line of C-H "specific-fit" refrigerator replacement controls.



9502N388 C-H "specific-fit" for Norge 1932-33-34 models



9521N64 C-H "specific-fit" for Norge 1938 models



9502N373 C-H "specific-fit" for Cold Spot 1932-33-34-35-36 models

9502N95 C-H "specific-fit" for Hostess 1933-34-35-36-37-38 models
9521N69 C-H "specific-fit" for Philco 1941 models

Featured by Cutler-Hammer refrigeration wholesalers and recommended by alert service dealers from coast to coast.



Analyst Says:

Industrial Products Can Foster Goodwill Between U.S. and Mexico, Brazil

By Eugene Hesz,
International Market Analyst

We have shown that Venezuela and Cuba are active markets for the products of American industry. But both these countries have their natural limitation, that of size.

Brazil and Mexico present an entirely different picture.

Taking an over-all view of the economic happenings in both countries and particularly of the treatment of foreign capital at the hands of the governments in the last 50 years, we might become discouraged.

A close scrutiny shows us that Mexico has actually treated the importer of know-how and of every kind of industrial, commercial, and financial activity somewhat better than Brazil up to a certain day. The fatal date was March 18, 1938, when the Mexican government decided to expropriate the holdings of our great American oil companies.

For some time, this step appeared to give the deathblow to American enterprise. But, happily, much has happened since.

This country has taken an understanding and forgiving attitude, and has, particularly during World War II, religiously carried out a program of paying good prices and paying cash to Mexico, to foster goodwill and reconstruct the disturbed economic relations. It has been the policy of Washington to take every possible step to help Mexico in her economic development so that the United States may enjoy the fruits of having a friendly and contented neighbor beyond its southern border—and not a colony of Moscow.

Had it not been for that fatal step of the Mexican government, our choice for the better treatment of foreign capital at an earlier date would have without doubt fallen on Mexico and not on Brazil. Brazil has been for the last 400 years a continuous goal of the European, and later the North American capitalist, despite the fact that his venture was grievously disappointed time and again by the attitude of the Brazilian authorities.

We are tempted to draw a close parallel with Mexico. We must admit that a confiscation of foreign property has not taken place in modern times in Brazil.

But, if we look at the treatment suffered by the foreign bond holders, particularly of British and American nationality, and if we remember that payment of interest and amortization, on hundreds of millions of dollars of such bonds has been stopped again and again, we may nearly repeat the word expropriation.

But, also, the hopeful aspect of the picture permits comparison.

It was again the initiative of the United States, heavily accentuated during World War II, which showed Brazil that this country is willing to purchase Brazilian products in enormous quantities and at fair prices. Our purchases during the last war were instrumental in assisting America and its allies to win this war and often even led to real want of some of the necessities of life of our Brazilian friends.

Again it has become our clear goal to assist a great South American friend to recover from the indirect ravages of war and to preserve the goodwill of a democratic nation, often threatened by "isms" of both extremes.

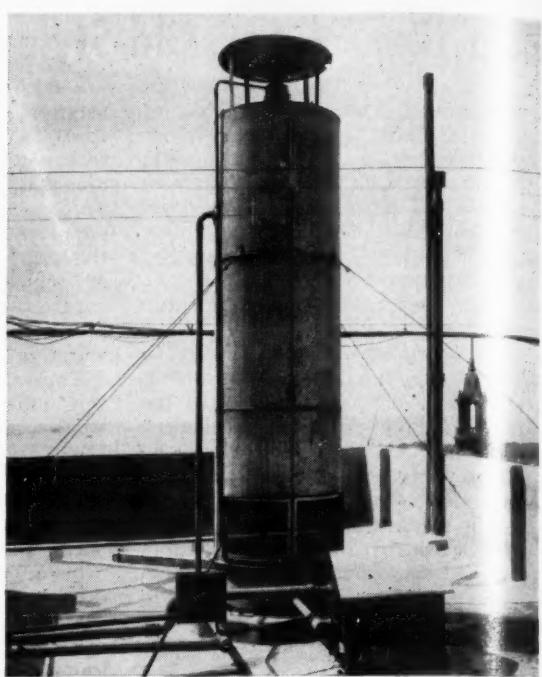
While nobody can predict whether or not our efforts to lead these two important Latin-American countries into and keep them within the family of democratic nations will be crowned with success, we are doing our best, and the American industrial product can be the bridge over which the reciprocal goodwill should travel in both directions.

The enormous potentialities of the Brazilian market, which only now are coming into play, will constitute an ever-increasing market for the American industrial product.

Cuba To Get Iron Factory

WASHINGTON, D. C.—A new factory for the manufacture of electric flat irons has been organized in Cuba and will be located near Havana, it was reported by the Office of International Trade, Department of Commerce.

Cooling Tower--Argentine Variety



In its own shops, Selmar, S. A., Argentine distributor of Chrysler Airtemp products, builds forced-draft cooling towers like this one for use with packaged air conditioners. A shortage of water makes use of cooling towers necessary, and the forced-draft type is employed because of the space factor.

Airtemp Distributor In Argentina Builds Own Forced Draft Towers

Buenos Aires, Argentina—Forced-draft cooling towers fabricated from sheet metal are being built by Selmar, S. A., Argentine distributor of Chrysler Airtemp products, to serve the packaged air conditioners it now handles.

Use of cooling towers for condenser water is made imperative by the shortage of water. The firm decided on a forced-draft tower rather than the conventional natural-draft type because space is sometimes an important factor.

Advantages cited for this type of tower are that it is easy to build, is small in size, has a nominal weight, has few corners to collect dirt and aggravate rust, is neat in appearance, requires minimum maintenance, and can be completely assembled in the shop.

Selmar, whose headquarters are in Buenos Aires, builds the towers—as well as all types of refrigerator cabinets—in its own shops.

Philco Team To Train Okinawa GI Mechanics

PHILADELPHIA—Headquarters of the First Air Division at Okinawa has announced the institution of a special refrigeration mechanics training program under the supervision of a Philco refrigeration team set up in a series of quonset huts in the air installation areas of both Kadena and Naha Air Force bases on Okinawa, according to Philco Corp.

Philco technical representatives were sent directly from Philadelphia as a refrigeration team to recondition all refrigeration units on the island and serve as instructors for courses in refrigeration mechanics, the corporation said. Philco representatives are teaching in the school at Kadena and at Naha.

"Teams of six men are now engaged in overhauling, repairing, and maintaining the various types of refrigeration units used by our military forces abroad," Philco reported. "These units may vary from large permanent refrigeration installations to small, portable, trailer-type units.

"Important refrigeration installations such as cooling units for blood bank storage are also among the specialized equipment upon which Philco technical representatives work.

"In addition to the overhaul, maintenance, and repair phases of the work of these teams, they are hard at work on a training program designed to furnish to the Armed Forces a continuous supply of men trained to carry on these important functions. They have established, in every location where they work, at least one training school. As many as 40 students are enrolled in a single school.

"The training program of 16 weeks consists of a minimum of four hours of formal classroom instruction each week. On-the-job training takes up the remaining 36 hours of the weekly schedule.

"A system of rotation of men within the training group ensures that each man becomes proficient in all phases of the training course."

Import Controls by S. Africa?

DETROIT—Reports from Cape-town and London said the South African government may soon establish import controls to restrict dollar purchases of refrigerators, radios, and certain other goods.

DEALERS: Here is an immediate delivery ice cube maker that will almost sell itself on the economy angle alone. Advertisement below is one of a series your prospects will be reading in national publications. We furnish complete literature to help you sell. Ask about territories now open.

SAVE UP TO 90%
on
ICE CUBE COSTS



Northwest
ICE CUBE MAKER

Saves Money—average cost per bushel (400 cubes) is 7c. What do you pay?
Freezes Faster—2 to 5 freezes per day varies with humidity and temperature conditions.
Cuts Shrinkage—special cabinet design maintains sub-zero cold in storage compartment even when door is open.
Freezes Colder—sub-zero cubes mean colder beverages, more economy because cubes last longer in drinks.

ICE CUBES *Unlimited*
with **TANDEM**
INSTALLATIONS

No limit to ice cube production with Northwest. We plan a multiple installation to occupy minimum floor space.

FOR INSTITUTIONS
requiring uninterrupted twenty-four hour service

FOR BARS AND CLUBS
fits under any standard bar—economical, time-saving

FOR RESTAURANTS
no cold loss despite frequent opening of cabinet.

FOR HOTELS
supplies continual demand for room service and direct rooms

1949 MODELS *Immediate Delivery*

JUNIOR SERIES—210 cubes each freeze 1 1/2 bu. storage (600 cubes)

SENIOR SERIES—336 cubes each freeze 3 bu. storage (1,200 cubes)

JUMBO SERIES—Junior with 3 bu. storage Senior with 5 bu. storage

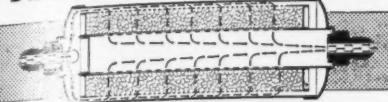
*Self contained or remote compressors

SEE YOUR NEAREST DEALER, OR WRITE

Northwest EQUIPMENT COMPANY

3021 5th Avenue So. Minneapolis 8, Minn.

REMCO HEAVY-DUTY "CROSS-FLO" DRIER-FILTERS AND FILTERS



UNIQUE "CROSS-FLO" DESIGN eliminates rolling, dusting and packing of drying agent, which eliminates pressure drop, clogging, poor refrigerant control performance and expensive coil backs. permits installation in liquid line, suction line or between refrigerant control and evaporator.

Ask Your Wholesaler or Write

REMCO, INC., ZELIENOPLE, PA.

longer life...

Jarrow...

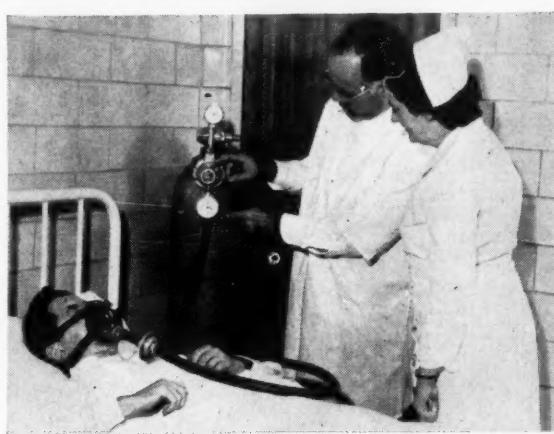
Refrigerator Gasket
Are Again Made From
Crude Rubber.

Always Demand These
Quality Gaskets

JARROW PRODUCTS

420 N. LA SALLE ST., CHICAGO 10, ILLINOIS

What's New



Pulmonary disorders caused by exposure to certain chemicals, gases, or superheated air can be treated with this 'M.S.A. Pneophore.'

'Pneophore' Supplants Manual Artificial Respiration For Pulmonary Disorders Caused by Chemicals, Gases

PITTSBURGH—A new apparatus for treating pulmonary disorders resulting from exposure to certain chemicals, gases, or superheated air in industrial processes has just been announced by Mine Safety Appliances Co., here. It also is used for emergency cases of asphyxiation.

Called "M.S.A. Pneophore" the device supplants manually applied artificial respiration.

Developed during the war to save the lives of aircraft crew members who required resuscitation at high altitudes, the Pneophore has been

withheld from commercial distribution to permit further development.

A portable instrument, consisting mainly of three valves, two gauges, rubber tubing, and facepieces, the Pneophore differs from a resuscitator in that it administers oxygen with intermittent positive pressure only. Suction that could damage lung tissues or other parts of the respiratory system is eliminated. The instruments are used on any oxygen cylinder with a standard thread.

If the subject is conscious, the device follows his natural breathing pattern. If breathing has been arrested, the valve operates on a regular cycle, interrupting oxygen flow automatically when the predetermined pressure is reached. Exhalation is by passive recoil.

"Heart" of the instrument is a double-acting valve that converts

Have You Tried the Motor Base Adapter Plate?

(3 sizes to fit 1/2 to 3 h.p. motors)



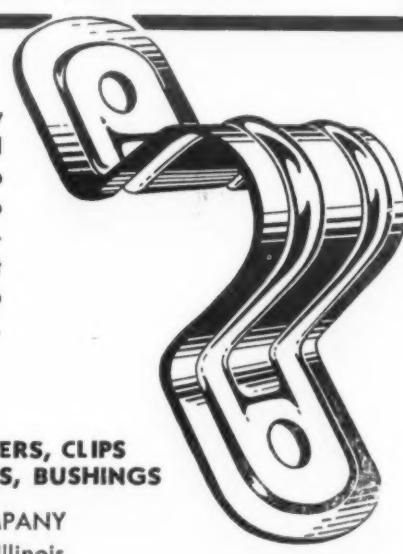
Install that motor; it fits the base—any base. No drilling or filing. No holes out of line. No rotor shaft too long or too short. Carry motors and adapters in every service car.

Servicemen in Pennsylvania and Ohio contact these wholesalers:

Akron Electric Motor & Parts Co.	Debo & Company
Akron, Ohio	Cleveland, Ohio
Akron Refrigeration Supply, Inc.	Eastern Refrigeration Supply Co.
Akron, Ohio	Greensburg, Pa.
Allied Electric Appl. Parts Co.	Eastern Refrigeration Supply Co.
Philadelphia, Pa.	Altoona, Pa. (No connection with above)
Allied Supply Company	Hansen, Percy G.
Dayton, Ohio	Akron, Ohio
Bodwell Company	Kamm Supply Company
Harrisburg, Pa.	Toledo, Ohio
Central Service Supply Co., Inc.	Kiefaber, W. H., Company
Scranton, Pa.	Dayton, Ohio

INQUIRES FROM JOBBERS INVITED
MOTOR ADAPTER CORPORATION
4730 JOY ROAD DETROIT 4, MICHIGAN TYLER 6-1224

MINERALLAC 2-HOLE PIPE STRAPS For Heavier Loads!



Designed for use on loads too heavy for one-hole Jiffy clips. Made of all new zinc plated tempered steel to give strength and rigidity enough to support heavier pipes, cables, conduits, etc. Available in sizes to fit pipes and conduits from 1/4-in. to 1-in. Can also be had in Everdur, copper, brass or aluminum.

Send for literature and prices

Specify **MINERALLAC** HANGERS, CLIPS, STRAPS, BUSHINGS

MINERALLAC ELECTRIC COMPANY
23 N. Peoria St., Chicago 7, Illinois

MINERALLAC

NEW SERVEL CONDENSING UNITS AT 10% LESS THAN FACTORY COST

Model No.	No. in Stock	H.P.	Price
H2NA1B	21	.3	\$64.47
L2MA1B	3	.3	\$65.84
H2EA1B	2	.4	\$67.04
L2EA1B	1	.4	\$67.57
LSU25F	2	Low 1/4	\$70.97
UB-25	2	Reg. 1/4	\$71.82
H2EA1C	23	.4	\$71.84
UB-33	3	Reg. 1/2	\$84.14
H2BA1C	13	.6	\$82.34
UB-50	1	Reg. 1/2	\$89.18
H2RA1C	4	.75	\$129.24
ZB-75	1	Reg. 3/4	\$152.54
H4FA2A	2	1	\$187.42

ALAMO DISTRIBUTING CO.
515 N. MAIN AVE. SAN ANTONIO, TEXAS

continuous positive pressure to intermittent positive pressure. Although this valve requires no adjustment to operate, there is a low pressure regulating valve that provides an adjustable outlet, from the 50 p.s.i. reducing valve, to range from 0 to 30 centimeters of water.

This enables a physician to regu-

late the volume of oxygen he deems satisfactory for the patient's lung capacity. Adequate safety valves also are provided to eliminate any hazard to the patient.

Besides its value in resuscitation, the instrument has demonstrated that it is an adjunct in the field of physical medicine for occupational diseases.

Bally

SALES BUILDER

The Refrigerated Case That Doubles Your Prospects!



Bally
OPEN STYLE
Refrigerated
Display Case

for "PERSONAL" or "SELF" SERVICE

the Small Store is a Customer

... it can continue to cater to individuals. The installation of a Bally Open Style Case results in shoppers automatically serving themselves pre-packaged items. They turn to the merchant for personal service for other purchases. It's an "involuntary self-service" idea that keeps the store on a personal service basis.

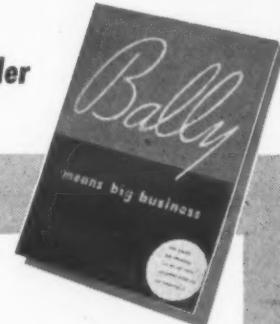
the 100% Self Service Store is a Customer

... it finds natural expression for its whole merchandising plan in the Bally Open Style Case. It's the refrigerated case that means more sales, lower operating cost and greater net profits. Items packaged ready-to-go, get attention in the Bally Case. Pre-packaged meat speeds service, reduces size of butcher force and increases profit.

You Can Be An Authorized Bally Dealer

Send For This Today

It's your copy of "Bally Means Big Business," packed with reasons why it pays to be an exclusive authorized Bally dealer.



NAME _____

PRESENT LINE _____

COMPANY NAME _____

ADDRESS _____

CITY _____

STATE _____

BALLY CASE & COOLER CO.

BALLY, PENNSYLVANIA

Huge Locker Market Is Untouched, But Must Be Sold, Convention Told

Intelligent, Aggressive Selling Is Needed Now

CHICAGO—"What the locker industry, and in fact, the whole frozen food industry, needs today is a long, careful look at the efforts and mistakes and progress of the past, and a determination to do a more intelligent and more aggressive job in the future, based on the fact that we are no longer in a seller's market, and that we're going to have to sell our service and merchandise exactly the same as every other industry."

This was one of the major points made in an address by Ray Farquhar, executive director of the Frozen Food Locker Institute, at the annual meeting of the group held here recently in connection with the Ninth Annual Frozen Food Locker Convention.

A vast market which has been hardly touched lies ahead of the locker field, he also emphasized, referring to the nation's 173,000 independent markets doing an annual business over \$20,000, where a small number of lockers, 200 say, could be installed to greatly increase the store's profits.

"When the first small group got together in Des Moines in December of 1939, there were only 1,200 widely scattered locker plants in the whole United States," Farquhar recalls.

"Yes, the frozen food locker industry has come a long way in nine brief years. Through the medium of 10,617 locker plants which were in operation on July 1, 1948, it has brought modern, economical food processing and preservation to more than six million American homes and is today processing and preserving more than three billion pounds of food every 12 months.

"Through the intelligent cooperation of locker operators and you men here today, vast strides have been made in the design, construction, appearance, equipment, and operating techniques of American locker plants.

"But because the expansion of the frozen food locker industry has fallen somewhat from its war-time peaks, some individuals who should know better are ready to consign it to the junk heap. They seem willing to turn



Elected during the Chicago convention, these men will guide the activities of the Frozen Food Locker Institute: (seated, left to right) Jack Smith, president; George Foerstner; Ray Farquhar, executive director; Del Card, treasurer; Perry Philips; (standing, left to right) E. E. Jackson; Carl Franzen; John H. Bonitz; Bryce Vollmar, vice president; R. W. Hayes.



Locker operators comprising the National Frozen Food Locker Association elected the following: (seated, l. to r.) W. C. Naylor, treasurer; Sib Warrington, permanent secretary; Vaughn Walker, president; Wm. Hasebrook, vice president; Harry Flory; (standing l. to r.) S. Hayward; M. L. Stewart; Roy Burns; and W. S. Winstead.

their backs on the needs, and investments of 10,600 locker operators, to shut their eyes to the impressive record of the past 10 years, and divert their efforts to fields which appear to offer a quicker and perhaps larger immediate return.

"Why did the frozen food locker industry make such substantial and rapid progress before the war? Because it provided then, as it provides today, the greatest means ever developed for eliminating the age-old

burdens involved in home food preservation, completely eliminating waste, and at the same time providing better food for the American family at the lowest cost ever known. No industry that can offer so many advantages is worth junking!

"The introduction of the home storage cabinet, the sale of commercially frozen foods, and all other forms of food processing, preservation, and distribution have offered nothing to detract from the basic soundness of the locker plant as a service business combining both quality and economy in supplying the food needs of the American family.

"Now let's take a look at the locker industry as we find it today.

"It will come as a surprise, and maybe a shock, to some of you who have never used a locker, for whatever reason, to know that right now locker plants are selling prime hind quarters of beef completely processed—chilled, cut, wrapped, quick frozen, and stored in the customer's locker—for less than 65 cents a pound! And making money on the transaction. That's what the locker industry, and quantity purchases, can do to high meat prices!

NOTHING TO PUT IN THEM

"From my own personal experience, I can tell you that the most common excuse given during recent months by customers who have discontinued the use of their lockers is that 'they have nothing to put in them.' And there, it seems to me, is where the great majority of locker operators have fallen down badly on their part of the job.

"They have failed to recognize the importance of seeing to it that their customers are kept sold on the idea of buying food in larger quantities, at substantial savings, and continuing the use of their lockers.

"Since its very beginning, the locker industry has done practically no advertising. The waiting lists which most plants enjoyed during the war time have led most operators to neglect publicity which has now become essential to the industry's growth and success. In no small measure, this has been, and is today, an important factor in the rental of lockers, in the slow-down of enthusiasm in the industry, and in the consequent drop in the construction of new locker plants.

"But there are other important factors worth reviewing. Here are some of them:

"A. The inevitable decrease in what was undeniably a war-time expansion in many parts of the country, due to the desire to hoard food. This situation has been apparent largely

(Continued on next page)

Featured at the booth of the Albright Co. during the locker show was this operating model of a "Jackstone Junior" contact freezer, here getting the once-over from James J. Moriarity, a contractor; E. J. Albright, head of the distributing firm exhibiting the product; and Bob Einarsen, Albright's eastern representative.



A 6-cu. ft. model of a standard Deepfreeze unit, plus the company's latest acquisition, the Frostair Duplex combined refrigerator and freezer, were displayed by Deepfreeze. Conferring at the booth are W. R. Rives, Chicago district manager; Harold E. Meyer, and Bernard J. Maguire.



Air purification by means of activated carbon offers many advantages to the operator of locker plants and other refrigeration applications, claims the Pur-Air Div. of American Solvent Recovery Corp. Digging for more data here is Ted Barnebey, while conferring with Walter Hanner, Jr., and Jake Koolbeck, locker operators.



Old friendships were renewed and manufacturers talked to dealers during the locker convention, as shown here at the Frigidaire booth with S. I. Miles, his son, M. I. Miles, L. E. Smith of Frigidaire, and W. D. Woody. The elder Mr. Miles and Woody are operators, while M. I. Miles is a Frigidaire dealer.

2,500 View New & Improved Products During Annual 4-Day Locker Show

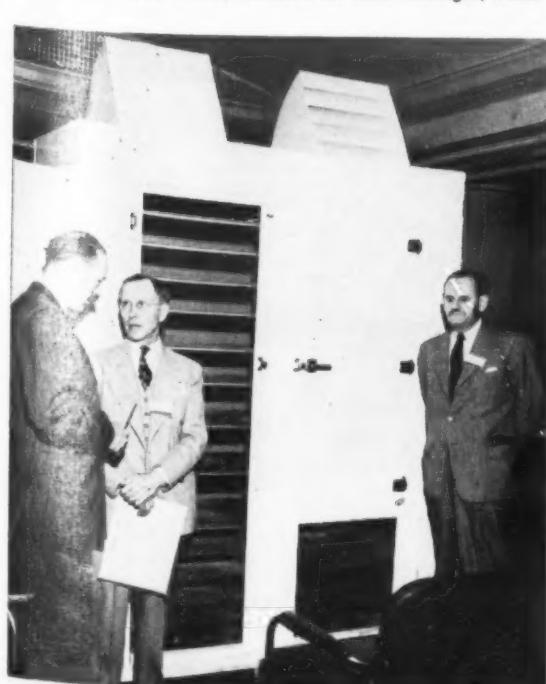


In this shot, Carrier Corp.'s broad line of refrigeration equipment for the locker plant, including the big "Freon" unit in the foreground, is temporarily overshadowed by the personalities of Mark Mooney, Carrier product manager, and visitors Eleanor Micelli of Curacao in the West Indies and Ann Edmonds of Minneapolis.

Among the attention-getters at the locker convention was the improved version of a warm room locker plant setup featured by the George-Ann Co. The trio in background engaged in conversation includes Richard Arf of Frigidaire, George Overton, the "George" of George-Ann, and George Poggen of Frigidaire. Mrs. Ann Overton is seated at right.



The hot gas automatic defrost feature of Tyler Fixture Corp.'s RF-8 8-ft. open double-duty display case for frozen foods was an important talking point. Here Roy M. Forster, locker operator (left), leans against a Harderfreez freezer while talking to Keith Metzger of Tyler, as Dick White, Harderfreez sales manager, loads the case with display packages.



Dole Refrigerating Co. put special emphasis on its "Duplex Blast Plate Freezer" at the locker show. The unit combines plate freezing with blowers to give locker operators a freezing unit and locker cooling unit in one package. H. W. Debaugh (left) of Dole explains its features to W. R. Hanner, an operator, while A. B. Brady looks on.

What's Wrong Today--

(Continued from preceding page)
in urban centers rather than in smaller country towns.

"B. The approach to somewhere near the saturation point of locker capacity in some of the leading agricultural and food producing states.

"C. Present high construction costs, resulting in difficulty in obtaining new financing.

"D. The expansion of the home storage cabinet business, resulting in a temporary diversion of attention from the locker industry. And let me add, for the benefit of those firms engaged in the manufacture and sale of home storage units, whether they be low-temperature cabinets or high and low-temperature refrigerators, that the sale of such units will never reach their potential heights until the sources of frozen food supply are widely expanded.

"That is exactly where the alert, progressive locker plant fits into the picture. No retail store—no chain organization—can today offer the facilities, the experience in handling frozen foods, and the economical service that can be supplied by the modern locker plant with its equipment for complete processing and reserve storage to back up the use of the home unit.

"E. The reluctance on the part of thousands of present locker operators to raise their rental and processing charges sufficiently to maintain the profit ratio which they enjoyed in the earlier days of their operation, and which proved attractive to investors, banks, and others interested in locker financing.

STILL CHARGING SAME RENTALS

"Even today, despite the 50-cent dollar, many plants are still charging the same rentals they did 10 years ago, which makes it virtually impossible for a new plant to be built in such an area with any prospect of a decent investment return, because of the necessity of meeting the low competitive prices charged by these older plants.

"And last, but by no means least, there is the belief and insistence of many newcomers in the industry that a locker plant, in order to succeed, must be housed in a modern, costly, streamlined building on the main street of town, and all too often accompanied by an excessive investment, high operating costs, and small profits.

"In the opinion of many of those who have had a part in the development of this industry, gentlemen, the frozen food locker business just isn't that kind of a business. Our banker friends agree, but a good deal of damage, from the financial point of view, has already been done by those who have built, or wanted to build, plants far beyond their means or ability to manage.

FALSE IDEAS OF BANKERS

"Bank examiners have cautioned banks to 'go slow' on locker plant financing despite the thousands of plants which are in successful and profitable operation. Until we can eliminate some of these false ideas and get the business back on the solid footing it enjoyed a few years ago, we can't expect much enthusiasm and help from those who have money to loan on sound enterprises.

"That doesn't mean for one minute that a locker plant should not be in reasonably close proximity to normal trading areas. We cannot run away from our customers, nor make it difficult for them to reach us.

"But it does mean, in our opinion, that a modest, relatively inexpensive plant in the back room or basement of a good, well-established grocery or market, or in connection with some other active, profitable business, stands a far greater chance of permanent success than does the monument built to satisfy someone's ego.

"Past experience has proven it, and the future of the industry, and the future profits of the firms represented here today, lie in the recognition of these facts, and an early return to the practices on which the industry was built so successfully.

"All of the directors of the Frozen Food Locker Institute, and most of our contractor members, believe firmly in this thinking. Based on this conviction, our advertising plans for the coming year will be devoted to telling this locker profit story to established food retailers who are our logical customers, and to placing our members in touch with such prospects.

"From a purely selfish standpoint,

'Queen for a Day' Reigns at Exhibitor's Booth



Mrs. Marilee Rolfs of Los Angeles, who as "Queen for a Day" on a popular radio program was awarded an Amana home freezer, was brought to the show for Amana by John J. Pollon (left), Amana west coast representative. Here she met George Foerster, who heads Amana's refrigeration operations.

it will be much more profitable to our members, and provide locker service to a far greater number of American families, if we can expand the industry along the lines of the grocery business, with large number of suburban plants which will bring locker service within the convenient reach of millions of new families.

"More than that, it will result in larger returns on the investments of these new plant operators, which will in turn increase the sales and profits of the firms represented here today.

"Just how great is this potential market? Let me give you some figures. There are in the United States today 375,000 independent grocery stores and markets. Of these, 173,000 do an annual business of more than \$20,000, and account for 87% of the total business done by such stores.

"These stores, or the majority of them, must eventually engage in the handling of frozen foods in one form or another. If they do not install lockers in sufficient number to satisfy their customers, they will install processing and freezing equipment to process foods for home storage units. Failure to do so will inevitably result in a loss of customers to locker plants already in existence or to other progressive merchants.

"Few merchants are going to stand idly by and lose their business if they can help it. Here, then, is a logical market for millions of dollars worth of equipment of every kind. By and large, these groceries and markets have the capital, the experience, the know-how to make an immediate success of a new department of their present businesses. They already have the customers, and the installation of locker or processing equipment does not represent a major investment.

"They stand a hundred times the chance of success as does the newcomer just starting out with limited capital, no customers, often little or no business experience, who will be satisfied with nothing less than the finest and most elaborate building in town. Certainly, there can be no question as to where our greatest future sales efforts should be directed.

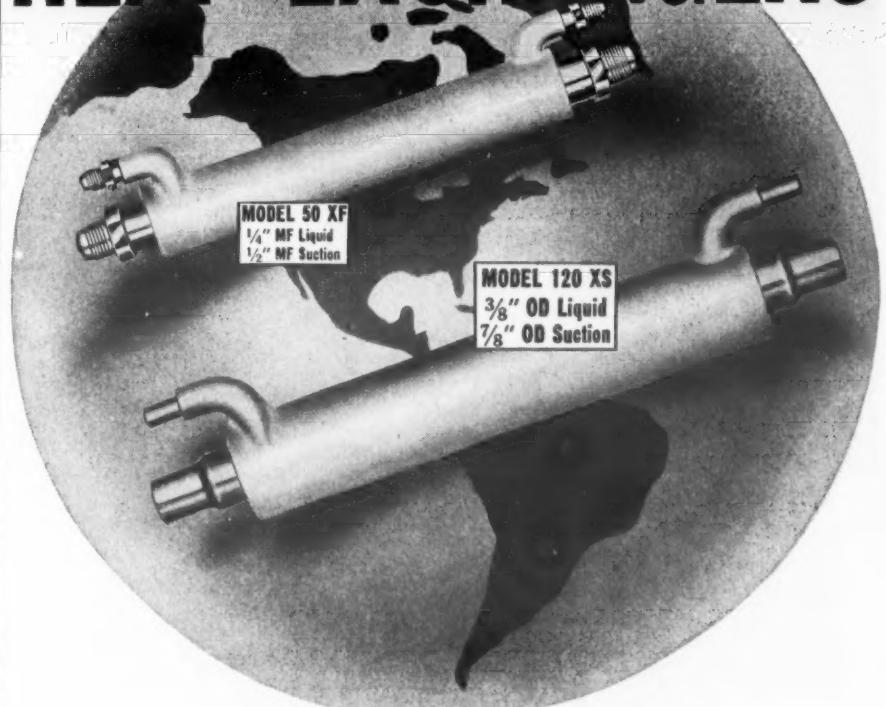
"And let me show you, briefly, what the installation of a locker plant means to the business and profits of one of these potential customers of ours.

"*Progressive Grocer* magazine, surveying a group of stores whose sales last year averaged \$85,450, found that the average net profit was 2.7% of sales. One of our contractor mem-

(Concluded on next page)

HEAT-X CAST ALUMINUM

HEAT EXCHANGERS



If your heat exchangers bear the name of HEAT-X you have (1) Minimum pressure drop. (2) No internal joints . . . no by-pass. (3) No oil trapping. (4) Compactness. (5) Efficiency. (6) Sizes to match your condensing units. (7) Simple selection data and ratings. (8) Straight through suction connection. (9) Minimum liquid charge. (10) Full range of capacities.

"A Heat Exchanger is Only as Good as its Freedom From Pressure Drop."

THE HEAT-X-CHANGER CO., INC.
415 Lexington Avenue, New York 17, N.Y. Brewster, N.Y.

Where Market Lies--

Honor FFLI President

(Concluded from preceding page)
bers with wide experience in the installation of small locker plants in grocery stores has prepared figures to prove conclusively that the addition of 200 lockers to one of these typical grocery stores will raise the net annual income by \$4,770, and increase the percentage of net profit to 6.42%.

"This increased income comes from the rental of lockers, from processing and slaughtering, and from an estimated increase of only 20% in grocery and meat sales.

"The cost of installing such a plant in an existing building, including the construction of locker, chill, and curing rooms, freezing cabinet or room, refrigeration equipment and lockers, small slaughter house, smoking, curing, and lard rendering equipment, track and scale, ladders, and other necessary supplies, should not be more than \$15,000. With an increased annual profit of nearly \$5,000, it doesn't take a mathematician to determine that it will prove a good investment.

BUILD PLANTS, NOT MONUMENTS

"Ten years ago, the locker business was established on a sound basis, because we could, and did, prove that the average plant would pay for itself in three years. The same thing is almost true today, if we, and our customers, will forget some of the fancy notions of the past two or three years, and start building locker plants instead of monuments.

"Yes, here and there there is room and justification for a large, exclusive locker enterprise, just as there is for a few large supermarkets. But for every one such plant, there is more justification for a hundred smaller ones.

"As a result, we will, for the coming months at least, concentrate our advertising in *Meat Merchandising* and *Progressive Grocer*, with a combined circulation of more than 130,000. Between them, they reach the majority of our potential prospects.

"When you compare such a potential market with 10,617 plants which were in operation on July 1, it hardly seems that our market has been exhausted. True, there are many areas in the middle west where present



Retiring as president of the Frozen Food Locker Institute, George Foersner receives a gift from Bryce Vollmar on behalf of the group.

locker facilities are completely adequate to meet the needs of the communities in which they are located. It would be folly to attempt to install many new plants in such areas.

"But in the entire state of New York, only 235 plants are in operation; in Pennsylvania, 242; in California, 519; in Massachusetts, 29. Yet in my own state of Nebraska, we have 480 plants serving more than 60% of our total population of 1,200,000. Not a single Nebraska town of 500 population is without one or more.

"Even so, many of these plants are in need of modernization or replacement, and new and additional equipment, if they are to render modern locker service to their patrons. So that even under such conditions, there is a very considerable market waiting to be sold. Does that give you some idea of the distance we have yet to go before we reach a national saturation point in the locker industry?

"Let me call your further attention to some interesting facts and figures about the volume of business which our present 10,600 locker plants have meant to the manufacturers, suppliers, and builders who serve this industry. To many of you whose business touches many fields, they may come as somewhat of a surprise.

"1. The average locker plant contains 520 lockers. The cost of building, interior construction, capital, and operating equipment has probably averaged at least \$50 per locker. That's a total investment of approximately \$573,000,000. Hardly a business worth writing off as obsolete.

"2. It has meant the sale of nearly 50,000 compressors.

"3. It has meant the sale of some 50,000 refrigerator doors.

"4. It has meant the sale of millions of dollars worth of pipe, plate, and blower coils.

"5. Millions have been spent for insulation and all kinds of construction materials.

"6. It has meant the sale of more than \$40,000,000 worth of lockers.

"7. Millions have been spent for the purchase of power meat saws, grinders, slicers, smoking and curing equipment, track, scales, ultra-violet lamps, and all other equipment necessary to the operation of a modern locker plant.

"8. And every year, many more millions are spent for the wrapping materials used to package the three billion pounds of food which are annually processed and stored in the nations 6,100,000 lockers. Definitely not a business worth consigning to the junk-heap because of a lack of vision or indifference to its potential possibilities.

"9. The percentage of failure among locker plants, as you all know, has been amazingly small. Those few plants which have failed were largely war-time promotions which failed to recognize the basic fundamentals of sound construction, financing, and operation. Against these few isolated cases are the thousands of successful plants, built with an eye to the true needs of their communities, which are today making a good profit for their owners, and rendering a real service to their patrons. They always have, and they always will.

SLUMP WON'T HURT

"10. And let me remind you too that because ours is a service business, with little or no merchandise investment, we will not be seriously hurt by lowering of the present price level. When the inevitable slump and drop in prices does come, the locker industry will be in a more enviable and advantageous position than it has ever been.

"11. What the entire industry needs today is a renewed recognition of its basic soundness and unlimited possibilities, and a combined effort on the part of every manufacturer, supplier, and builder to acquaint nearly 40,000,000 American families who do not presently use locker service, with its many advantages."



(Above)

Baker Ice Machine Co.'s new "Kold Cell Locker Unit," a complete locker unit for erection within a store building, was shown in model form to A. O. Pipkin (center) by W. B. Kruse and E. Lee Flaxa.



Freezer doors clad in aircraft type aluminum were featured by the Chase Cold Storage Door Co. It's being inspected by Gordon M. Dutterer, an operator; Robt. Moscrip of Chase; M. G. Stephenson, an operator, and Paul F. Rusche (Chase).



(Above)

It's a family affair at the General Electric booth. E. J. Moak and son Freddy with Priscilla Porterfield of the G-E Consumers Institute examine one freezer while Mrs. Moak and Wm. H. Leahy (G-E) look at another.



Attractive Home Economists Margaret Huck and Mrs. Catherine Beck, the director, were major attractions at the Crosley Frostmaster display.



While the condensing unit end of the Iceberg Locker system is being inspected, Howard Trafton of the Iceberg company chats with M. M. Trimble, a locker plant operator from Saskatoon, Canada.

It's NEW... It's OUTSTANDING
It's CONTINUOUS DISPLAY by...

Fogel
REFRIGERATOR COMPANY
PHILA. PENNA.

Another Addition
To One of America's Most Complete Lines

The NEW FOGEL "Continuous Display" MEAT CASE

Designed for continuous, mass display, the Fogel "Continuous Case" is fastly becoming the nation's No. 1 Meat Display Case.

Look At These Money Making Advantages!

1. ENDLESS DISPLAY: Made up of separate sections that are attached together for a continuous line of display without the usual in-between ends that obstruct view and waste space.

2. MORE DISPLAY: The extra wide display surface of this massive case provides for maximum display on three rows of porcelain platters. This is in addition to the extra display space made available by its endless construction.

3. EASY TO ADD SECTIONS! New sections can easily be added when needed, or individual units made of sections if desired, at any time.

Don't wait! Take advantage of this great opportunity to sell the outstanding Meat Display Case of the year. Mail the coupon TODAY for additional details concerning this wonderful opportunity and for information concerning FOGEL equipment... one of the most complete lines in the commercial refrigeration industry.

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Detailed information Continuous Case.
 Complete line (illustrated) folder.

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Address _____

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REMA-RSES Chicago Conference Program--

(Concluded from Page 1, Column 3)
strictly educational in nature and every exhibit is especially prepared by the manufacturer to indicate how the product is made, how it should be installed, how it should be serviced, and why it does a good job," Rema pointed out.

Those interested in attending the conference should make reservations for rooms direct to the Hotel Sherman, Rema said. All reservations will be confirmed by the hotel.

The educational conference is open to the entire refrigeration and air conditioning industry and to its allied industries. Registration fee is \$1 and is made to reimburse the local RSES chapter for its necessary expenses.

Members of Rema's educational committee in charge of exhibits are H. F. Spohrer, Sporan Valve Co., chairman; K. B. Thorndike, Detroit Lubricator Co.; E. M. Flannery, Bush Mfg. Co.; G. E. Graff, Ranco Inc.; and J. M. Schlemmer, General Controls Co.

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Sold thru refrigeration and insulation distributors. Write for particulars.

Master Manufacturing Corp.
121 Main St. Sioux City 4, Iowa

The Illinois Association of RSES and Chicago Chapter are hosts to the convention and educational conference. Heading the general conference committee is International Director Floyd Lilley, with E. Riccio, Chicago Chapter, and Willis Stafford, Tri-County Chapter, co-chairmen.

Program for the four-day period follows:

FRIDAY, NOV. 19

9:00 a.m.—Registration.
2:00 p.m.—Convention opens—RSES business meeting.
4:00 p.m.—"Servicing Water Coolers," Earl Jennings, service manager, Temprite Products Corp.

SATURDAY, NOV. 20

9:00 a.m.—Question and answer forum.
10:00 a.m.—"Servicing Milk Coolers," William Ural, Victor Products Corp.

11:00 a.m.—"Selecting and Installing Finned Evaporators," C. L. Benson, manager, Refrigeration Div., McQuay, Inc.

12:00 noon—Recess.
12:30 p.m.—Educational exhibits open.

5:30 p.m.—Educational exhibits close.
6:00 p.m.—Banquet and entertainment.

SUNDAY, NOV. 21

10:30 a.m. to 2 p.m.—Educational exhibits open.

1:30 p.m.—"Safe Handling of Compressed Gases," Robert Moore, Superior Valve & Fittings Co.

2:30 p.m.—"Built-In Motor Protection," B. O. Haun, engineer, Spencer Thermostat Co.

3:30 p.m.—"Design of Motor-Speed Compressors," C. E. Ploger, chief engineer, Electric Refrigeration Div., Servel, Inc.

5:00 p.m.—Educational exhibits open.

10:00 p.m.—Educational exhibits close.

MONDAY, NOV. 22

9:00 a.m.—Question and answer forum.

10:00 a.m.—Business session.
12:00 noon—Educational exhibits open.

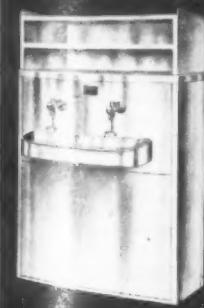
4:00 p.m.—Educational exhibits close.

In addition to the above program, a series of educational briefs composed of talks by factory experts on various refrigeration products and problems, augmented by motion pictures and illustrated slide films, will be interspersed throughout the program.

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WATER COOLERS

Stainless steel. Special cafeteria design. High capacity, super storage. Shelves, glass-filters and/or bubblers as required.



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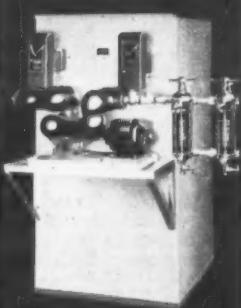
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Temperatures to 34°—
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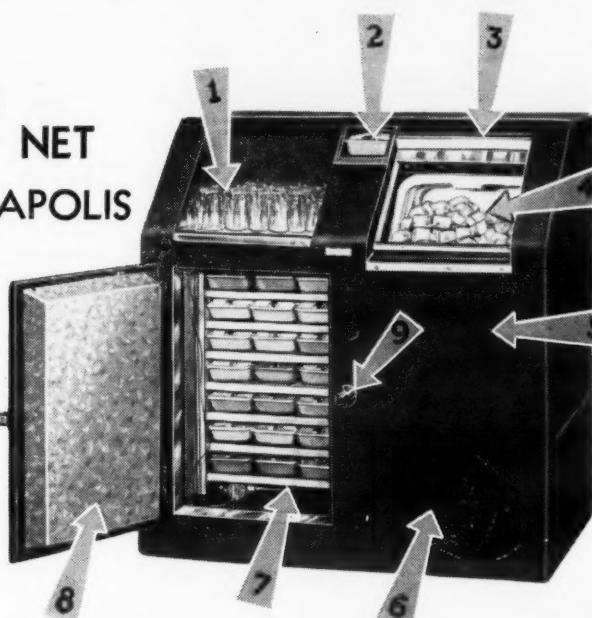
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A SELF-CONTAINED ICE CUBE MAKER

With Built-In Automatic Tray Filler

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3. Disappearing doors.
4. Stainless steel storage bin holds 1 1/2 bushel frozen cubes.
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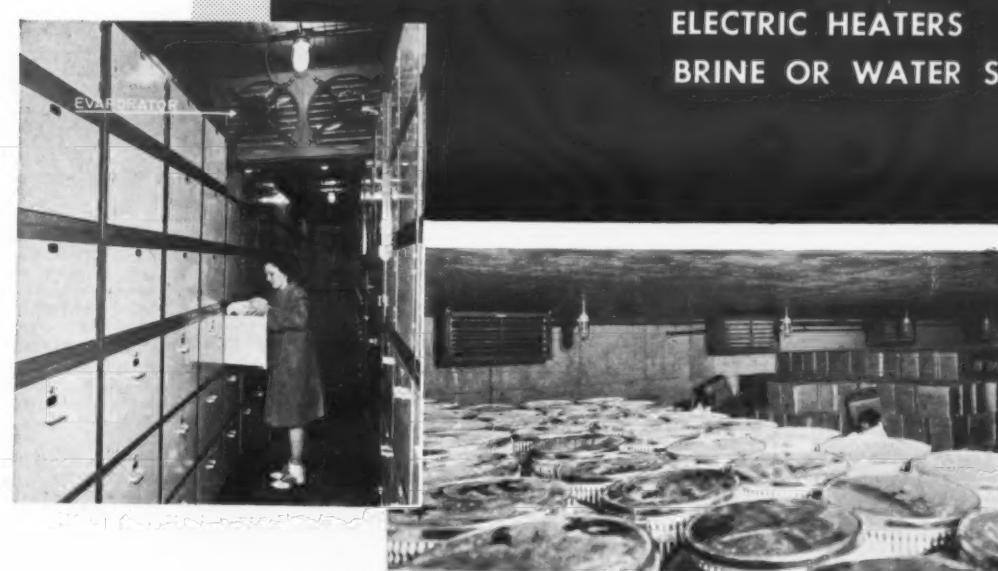
at Any Temperature
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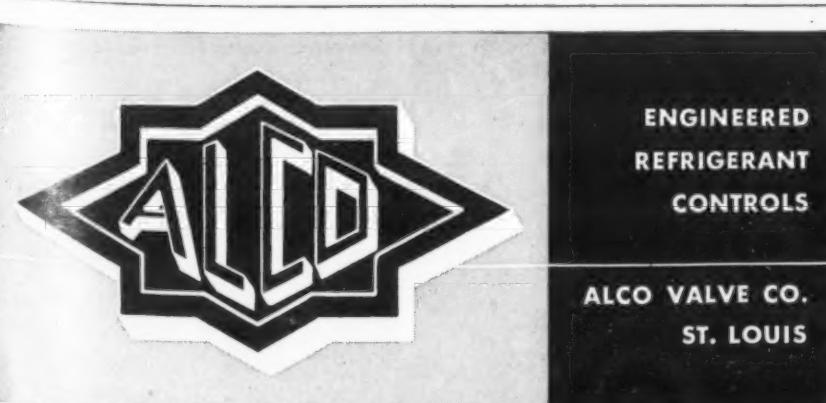
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CONTROLS

ALCO VALVE CO.
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Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Absorption-Type Refrigeration (6)

Thus we find that in the Munters-Platen system there are three elements: hydrogen, anhydrous ammonia, and water, and when the latter two are mixed, the solution is called "aqua," either "strong aqua" or "weak aqua," according to the concentration of anhydrous ammonia in the solution.

THREE ELEMENTS AND THREE CYCLES

Also there are three "cycles": the aqua cycle, the hydrogen cycle, and the ammonia cycle.

The aqua cycle occurs chiefly in the absorber and generator. The weak aqua from the generator absorbs anhydrous ammonia in the absorber and the resulting strong ammonia passes back to the generator, where some of the anhydrous ammonia is driven out of the solution by the heat applied to the generator. This action is continuous as long as heat is applied to the generator and cooling is applied to the absorber.

The hydrogen cycle takes place in the absorber and evaporator. Hydrogen exists in these two parts, and the tubing that connects them. As the anhydrous ammonia enters the evaporator, it evaporates, and diffuses into the hydrogen. The mixture of ammonia and hydrogen, being heavier than hydrogen only flows by gravity downward to the absorber. Therefore, the evaporator must be at a higher level than the absorber.

In the absorber, the anhydrous ammonia is absorbed into the weak aqua, thus changing it to strong aqua. The hydrogen is thereby released, and, being very much lighter than ammonia vapor, rises from the absorber and passes back to the evaporator through a large tube provided between the top of the absorber and the top of the evaporator for that purpose.

This is the hydrogen cycle—from the evaporator to the absorber in company with the ammonia vapor; and then back from the absorber to the evaporator as a comparatively pure hydrogen gas.

AMMONIA CYCLE THROUGHOUT THE ENTIRE SYSTEM

The ammonia cycle comprises the entire system. The anhydrous ammonia exists as a straight ammonia liquid, free of water, in the latter part of the condenser and the tube leading from the outlet of the condenser to the top of the evaporator.

It exists as a vapor in the evaporator in the line from the evaporator to the absorber, although it is diffused with hydrogen. In the absorber and generator, the ammonia exists in solution with water—a strong solution in the absorber and a weak solution in the generator. In the generator, the ammonia is driven off as a vapor from the solution of water and ammonia.

Some water vapor is driven off with the ammonia vapor, so the vapor that reaches the rectifier consists of both ammonia vapor and water vapor. In the rectifier the water vapor is separated out and sent back to the generator, and the ammonia vapor

passes into the condenser, where it loses heat to the air or water, which ever is used, and thus changes back to liquid anhydrous ammonia, ready to be used over again in the evaporator, thus completing the ammonia cycle.

OTHER PARTS FOR EFFICIENCY

In addition to the main parts of the equipment involved in these three cycles, there are other parts, such as heat exchangers, that, while desirable and which contribute to increased efficiency, are not absolutely necessary to the basic operation of this system.

At first, the Munters-Platen system was applied to a small household refrigerator made in Sweden. Water was used to cool the absorber and condenser.

About 25 years ago, Servel acquired the rights to use this system in the United States. Its refrigerator was also called the Electrolux. Servel later acquired the outright ownership of the U. S. patents, and its refrigerator, based on the original Munters-Platen system, but since greatly improved, is now known simply as the Servel refrigerator.

CHANGED FROM WATER COOLED TO AIR COOLED

The earlier Electrolux units made in the United States by Servel were water cooled also, but to widen their range of application and salability, the system was later converted to air cooled.

The early Servel Electrolux air-cooled units used a secondary system employing methyl chloride as the secondary refrigerant in the secondary portion of the system only. The use of a secondary system allowed the absorber, generator, etc., to remain in about their same location, the secondary refrigerant, methyl chloride, carrying the heat from these parts to a more convenient place to dissipate it to the room air.

Finally, however, the secondary cooling system was eliminated, and the present Servel absorption refrigerator is directly air cooled without using a secondary system; that is, the heat from the absorber and condenser is thrown directly from them into the room air rather than through a secondary refrigerant.

ADAPTED TO KEROSENE AND LP GAS

Originally the Electrolux made by Servel was designed for natural or artificial gas as the source of heat to the generator; that is, as the fuel for the flame under the generator, although in areas where the electric rate is quite low, such as in the Pacific Northwest, electric elements have been used to heat the generator.

In the early thirties, the Servel design was revised to permit the use of a kerosene burner to supply the heat to the generator, thus again greatly widening the range of applicability of this type of absorption refrigerator.

In the last few years, "bottled gas," or "L.P. gas" (liquified petroleum gas) as it is sometimes called, has become increasingly popular, especially off the gas utility lines, for cooking, industrial applications, mobile equipment, and other uses.

It was comparatively simple to adapt the Servel burner from natural

gas or artificial gas to the L.P. gas, and still further increase the range of applicability of the absorption refrigerator. In doing this, the chief difficulty lay in the fact that the L.P. gas has a heat content of around 2,500 B.t.u. per cubic foot, which is about 2½ to 5 times the heat content of natural or artificial gas respectively.

This made it difficult to meter the extremely small amounts of such "rich" gas as is required for the small flame used under the generator. This is especially true when the refrigerator is cold enough, and the thermostatic control cuts the size of the flame down to a minimum, until the refrigerator starts to warm up again and increased refrigeration is required. Then the flame is thermostatically turned back up again.

THE PRESENT SERVEL SYSTEM TO BE EXPLAINED

The next instalment will present a diagram of the present Servel absorption, air-cooled unit, and study some of the additional parts, or "refinements" added to increase the efficiency or applicability of the system.

(To Be Continued)

**NO ADDITION!
NO SUBTRACTION!**

**Just Glance at
this Direct-Reading Scale on
the Penn 270 Series Control**

No addition... No subtraction... you set the "cut-in" and "cut-out" points directly with this simple "sight-set" calibrated scale. Never before has it been so easy to make required adjustments. Never before has an air conditioning and refrigeration control embodied so many plus values as are offered by the PENN 270 Series.

For the first time here is a control with a load-carrying, 2 pole construction—actually two switches in one. Examine the Penn 270 and you'll see it has an extra sturdy contact mechanism to give dependable electrical performance. Its terminals are molded right into

THE DIRECT DRIVE UNIT UNITED MOTOR INDUSTRIES CORPORATION POWER-PACKED, COMPACT

A Single Shaft for Motor, Compressor, and Fan. Fewer Moving Parts—No Gears, Belts or Pulleys.

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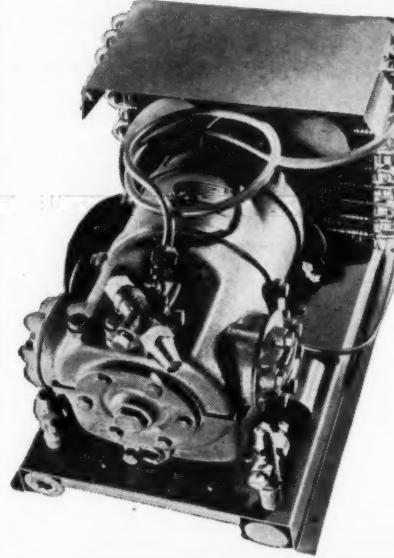
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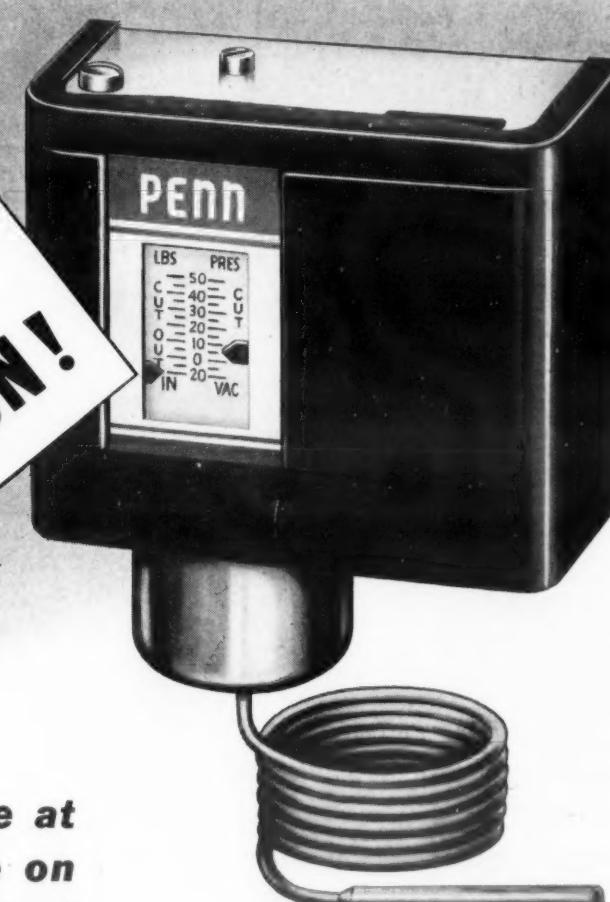


Larkin refrigeration products are modern proof that engineering beauty can add to functional efficiency. Originator of the Cross Fin Coil, Larkin also produces highest quality in Humi-Temp Forced Convection Units—Bare Tube and Zinc Fused Steel Plate Coils—Evaporative Condensers—Air Conditioning Units—Instantaneous Water Coolers—and other superlative equipment for commercial and industrial refrigeration.



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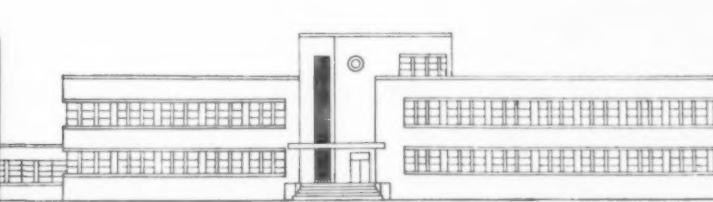
the block assembly for strength and permanence. Its calibration and accuracy are not affected by vibration. And you pay no premium for all of these plus features found only in PENN Refrigeration Controls.

No wonder the PENN 270 is the talk of the industry. For versatility of applications, for simplicity, efficiency and dependability this control sets a new high standard. Write now for the complete story in Bulletin 2652.

Penn Electric Switch Co., Goshen, Indiana.

Export Division: 13 E. 40th Street, New York 16, U. S. A. In Canada: Penn Controls, Ltd., Toronto, Ontario.

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We pioneered the
Pro-Seal finish for
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Pro-Seal is a mighty fine
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basic wire shelf.

WALL WIRE
PRODUCTS COMPANY
PLYMOUTH • MICHIGAN
Makers of
REFRIGERATOR SHELVES • STAMPINGS
FORMED AND WELDED PRODUCTS

NARC Convention Program--

(Concluded from Page 1, Column 2)
E. J. O'Keefe, O'Keefe & Walters,
Chicago.

THURSDAY, NOV. 18

9:30 a.m.—Welcome address, H. E. Wheeler, president, Refrigeration Contractors Association of Chicago; address of national president, E. S. Wright; Albert G. Weil.

Forum on "Equipment Sales and Merchandising Methods." Moderator, R. S. Penn, Talbert-Thomas Co., Detroit. "Air Conditioning Construction," J. F. Floreth, Westerlin & Campbell Co., Chicago; "Commercial Refrigeration," J. W. Krall, Tyler Fixture Corp.; "Room Air Conditioners," H. E. Wheeler, Air Comfort Corp., Chicago.

11:00 a.m.—Forum on "Service and Management Methods." Moderator, S. Ray Thompson, Thompson-Hense Corp., Chicago. "Labor Cost Control," Warren W. Farr, Refrigeration Supply Co., Chicago.

tion Maintenance Corp., Cleveland; "Parts Inventory Control," E. Stuart Files, R. Cooper, Jr., Inc., Chicago.

2:30 p.m.—Forum on "Guarantees." Moderator, F. J. Zoppel, Columbus Refrig. Corp. "Guarantees from Contractor's Standpoint," Emil Flanigan, Allied Refrigeration Engineering Co., Cleveland; "Guarantees from the Condensing Unit Manufacturer's Standpoint," L. W. Larsen, Tecumseh Products Co.; "Guarantees from the Wholesaler's Standpoint on Condensing Units," H. W. Small, Thermal Co., Inc., St. Paul; "Guarantees from the Valve and Control Manufacturer's Standpoint," F. G. Coggin, manager, Refrigeration Div., Detroit Lubricator Co.; "Guarantees from the Wholesaler's Standpoint on Valves and Controls," Jack Glass, Chase Refrigeration Supply Co., Chicago.

4:00 p.m.—Forum on "Service Sales Merchandising Methods." Moderator, George Johnston, Johnston Refrigeration Construction, Detroit. "Service Sales," J. J. Geering, J. J. Geering Sales & Service, Milwaukee; "Contract Sales," H. O. Miller, Murphy & Miller, Inc., Chicago; "Parts Sales," Walter McCarty, McCarty Bros. Equipment Corp., Chicago.

FRIDAY, NOV. 19

9:30 a.m.—Forum on "Licensing." Moderator, Frederick R. Bolton, executive secretary and counsel, Refrigeration Contractors Association of Detroit. "Contractor's Experience Under Licensing," Neal S. Templin, executive secretary, Refrigeration Contractors Association, Los Angeles; "Benefits to Public Under Licensing," John C. Rehard, chief refrigeration safety engineer, Detroit; "Reasons Against Licensing," William Henderson, executive vice president, Air Conditioning & Refrigerating Machinery Association; "General Licensing Experience," Leslie D. Price, manager, Engineering & Regulatory Legislation Depts., N.E.M.A.; "Preparing Licensing Codes," Nathan Edelstein.

11:30 a.m.—"Finding, Hiring, Training, and Compensating Salesmen," Mark Mooney, Carrier Corp.

12:00—"How Recent Labor Legislation Can Affect You," E. J. O'Keefe.

2:30 p.m.—Closed business session.

Presto Complies--

(Concluded from Page 1, Column 4)

Act and the Federal Trade Commission Act by decreasing competition and fostering monopoly tendencies. Therefore, National and five of its officers were ordered to cease and desist from:

1. Selling or making or enforcing any contract for the sale of the products on the condition that the purchaser shall not deal in the products of a competitor.

2. Offering favorable shipment allocations or any other inducement to purchasers on the condition that they shall not deal in the products of a competitor.

3. Refusing or threatening to refuse to deliver the products to distributors who are not willing to purchase them under an exclusive-dealing arrangement.

4. Inducing any customer to refrain from dealing in rival products.

Findings of the FTC describe National as "the world's largest manufacturer" of pressure cookers and canners. Sales records indicate that the total gross dollar sales of the two items amounted to more than \$16,000,000 for one six-month period, the findings declare.

An excerpt from a letter purportedly written by National to one of its wholesale distributors on Feb. 15, 1946, was cited by the FTC. The commission said the letter read in part:

"Based on the fact that you will handle only our lines of pressure saucers and pressure cookers as soon as your present order expires with the one competitor, we will be willing to make you definite monthly shipments as follows on Presto Cookers. . . ."

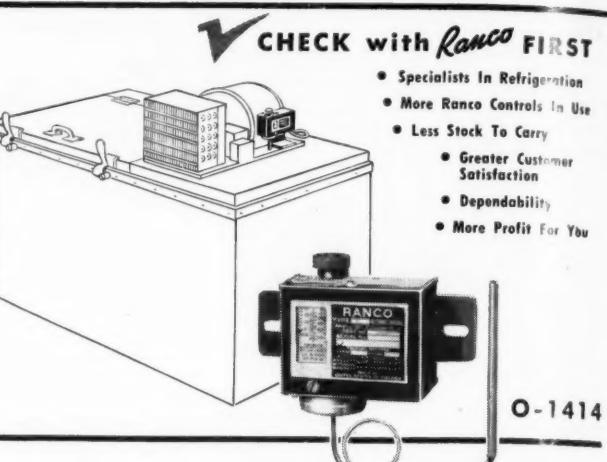
Following an allocation breakdown, the letter concluded:

"We know that once you are on a 100% exclusive basis that we will then be in a position to bend over backwards to get more and more cookers to you."

These officers of the company were ordered to stop the practices: Lewis E. Phillips, president; A. A. DeBonville, Morton Phillips, and Ed H. Wittenberg, vice presidents; and J. Phillips, treasurer.

Ranco CONTROLS FOR MILK COOLERS

The use of more than 15,000,000 Ranco Refrigeration Controls is ample evidence of the acceptance of these precision-built controls by the refrigeration industry. Add to this the fact that Ranco produces specialized controls to meet the requirements of every refrigeration application, and you'll know why Ranco Controls are preferred. For milk cooler applications, the Type O-1414, O-1477 and O-1514 are typical of the specialized design and operation provided in the complete Ranco line. Your Ranco wholesaler will gladly show you these, and the many other controls in the Ranco line . . . ask to see them today.



Ranco Inc.
COLUMBUS 1, OHIO



World's Largest Manufacturers of REFRIGERATION CONTROLS

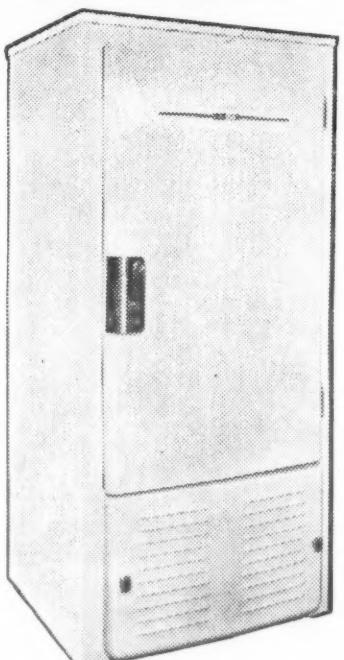
WILSON
REFRIGERATION, INC.
• FARM AND HOME FREEZERS
• REACH-IN REFRIGERATORS
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• FARM MILK COOLERS
DIVISION OF WILSON CABINET CO., INC.
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REFRIGERATOR DIES WANTED

Large freezer manufacturer will purchase usable set of dies or stampings for any size domestic refrigerator up to 10 cubic ft.

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Air Conditioning &
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SANITARY'S NEW 6 cu. ft. and 4 cu. ft. Electric Refrigerators are now available.



No. TE62 illustrated—

23 1/2" w. x 22 3/4" d. x 50 1/2" h.

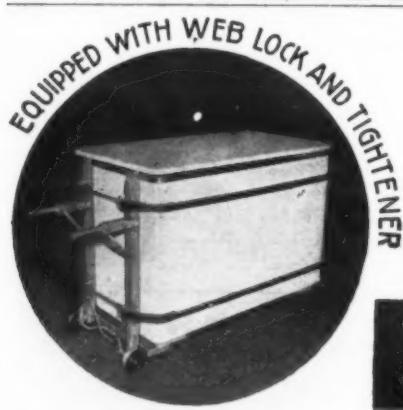
Also Available—Model TE46—

4 Cu. Ft. Size—

23 1/2" w. x 20 3/4" d. x 41" h.

SANITARY REFRIGERATOR COMPANY

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ICE REFRIGERATORS FOR MORE THAN 40 YEARS
QUICFREZ FARM LOCKER PLANTS SINCE 1939



Are You Looking for An Easy Way
to Handle Stoves, Refrigerators
and Freezers

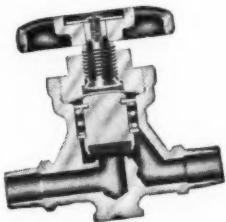
Solve Your Problem with the New
ROLL-OR-KARI Dual Trucks

Patented Step-On-Lift • Folding Handles
Capacity 1000 Lbs. • Shipping Weight 40 Lbs.
WRITE TODAY

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Superior Life-Time DIAPHRAGM PACKLESS VALVES

OUTSTANDING FEATURES

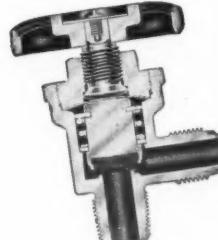


1. Husky one-piece lower stem
2. Controlled stem travel assures "Life-Time" diaphragm performance
3. Scientific lubrication, large bearing surfaces and polished stem heads eliminate wear and assure smooth, easy operation
4. Large drillings give full flow
5. Operates under normal pressure with flow in opposite direction
6. Smooth pleasing appearance—symmetrical design
7. Individual wrench pads for tightening flare connections
8. Unique sweat connections permit soft or silver soldering without removing internal assembly
9. High quality, long wearing, seating insert
10. No special tools required for servicing

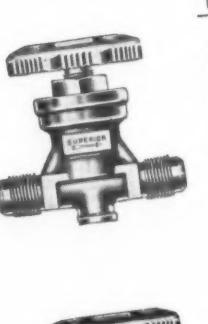
Superior ANGLE VALVES



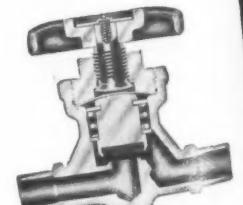
CATALOG NUMBER	CONNECTIONS	SAE Flare	Male Pipe	LIST PRICE EACH	NET WT. EACH LBS.	CODE WORD
104-4B		1/4"	5.00	.75	.75	Lefom
104-4C		1/4"	5.00	.75	.75	Lefro
104-6B		3/8"	5.00	1.00	1.00	Lefus
104-6C		3/8"	5.00	1.00	1.00	Legaz
105-8B		1/2"	5.00	1.25	1.25	Legon
105-8C		1/2"	6.00	1.25	1.25	Lekad
106-10D		5/8"				



Superior LINE SHUT-OFF VALVES*



CATALOG NUMBER	CONNECTIONS	SAE Flare	LIST PRICE EACH	NET WT. EACH LBS.	CODE WORD
204-4		1/4"	\$5.30	.9	Lelim
204-6		3/8"	5.30	1.25	Lemaf
205-8		5/8"	6.60	1.5	Lemjo
206-10	O.D. Sweat	1/2"	5.30	.9	Lemuz
204-4S		1/4"	5.30	1.25	Lenag
204-6S		3/8"	5.30	1.5	Lenek
205-8S		5/8"	6.60	1.5	Lenov
206-10S		1 1/2"			



Superior BRANCH SHUT-OFF VALVES*



CATALOG NUMBER	CONNECTIONS	SAE Flare	LIST PRICE EACH	NET WT. EACH LBS.	CODE WORD
304-4		1/4"	\$6.25	1.00	Lepem
304-6		3/8"	6.25	1.50	Lepuc
305-8		5/8"	6.25	1.75	Lepve
306-10	O.D. Sweat	1 1/2"	7.50	1.75	Leraj
304-4S		1/4"	6.25	1.00	Lesak
304-6S		3/8"	6.25	1.50	Lesoz
305-8S		5/8"	6.25	1.75	Letep
306-10S		1 1/2"	7.50	1.75	Letuf



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